1987
ALBERTA HOUSE COST COMPARISON STUDY

24 Unit
Walk-up Apartment

Alberta
MUNICIPAL AFFAIRS
Housing Division

1987 ALBERTA HOUSE COST COMPARISON STUDY

WALK-UP APARTMENT

NOVEMBER 1987

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ISSN 0822-3912

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PREFACE

The main purpose of the 1987 Alberta House Cost Comparison Study is to provide estimates of the hard construction costs of a prototypical single-detached dwelling and a 24 unit walk-up apartment in nine urban centres in this Province.

The study also compares 1987 residential construction costs with those of previous years in the selected urban centres. Most emphasis is given to a comparison of 1987 with 1986 costs and the study includes an analysis of these differences.

The 1987 study has been carried out by Helyar & Associates and is documented in three reports:

1987 Alberta House Cost Comparison Study : Executive Summary
1987 Alberta House Cost Comparison Study : Single-Detached Dwelling
1987 Alberta House Cost Comparison Study : Walk-Up Apartment

Additional copies of any of these reports can be ordered from :

ALBERTA MUNICIPAL AFFAIRS
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1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Objectives

The objectives of the 1987 Alberta House Cost Comparison Study were:

1. To determine 1987 hard residential construction costs in selected urban centres in Alberta.
2. To determine reasons for differences in residential construction costs in the selected centres.
3. To carry out detailed comparisons of 1987 residential construction costs with 1986 residential construction costs in the selected centres.
4. To determine and comment on residential construction cost trends over the last eight years in the selected centres.

1.2 Scope of Work

The 1987 Alberta House Cost Comparison Study examines the construction costs of a typical single-detached dwelling and a 24 unit walk-up apartment building.

The study has been documented in three reports : an Executive Summary, a report on a typical single-detached dwelling and a report on a walk-up apartment. This report deals with the walk-up apartment.

The study examines building construction costs in the following centres:

1. Edmonton
2. Calgary
3. Red Deer
4. Fort McMurray
5. Grande Prairie
6. Hinton
7. Lethbridge
8. Medicine Hat
9. Lloydminster

1.0 INTRODUCTION

1.2 Scope of Work (continued)

The cost analysis of both the single-detached dwelling and the walk-up apartment examines the building construction cost differences between each of the centres and highlights the reasons for those differences with reference to such factors as :

a) material costs,
b) labour costs, and
c) building features and inclusions.

The cost estimates of the walk-up apartment for each centre include all structural, finishing, mechanical, and electrical work as shown on the drawings and included in the specifications, and also include allowances for site overhead and contractors'overhead and profit. The cost estimates exclude the following items:

a) cost of land and site clearance,
b) site servicing costs,
c) site development costs,
d) design fees and expenses,
e) legal fees and expenses, and
f) marketing and real estate financing costs,

1.0 INTRODUCTION

1.3 Drawings

The drawings used in the study for the walk-up apartment include :

1) Site plan
2) Foundation plan
3) Basement floor plan
4) Main floor plan
5) 2nd & 3rd floor plan
6) Building elevations
7) Section and details
8) Basement floor plan - Mechanical Layout
9) Main floor plan - Mechanical Layout
10) 2nd & 3rd floor plan - Mechanical Layout
11) Basement floor plan - Electrical Layout
12) Main floor plan - Electrical Layout
13) 2nd & 3rd floor plan - Electrical Layout

These drawings are included in the Appendix.

1.4 Approach

The building construction costs are detailed in the report under the headings of labour and material/equipment costs. Labour rates used in the report are either those established by the trade union concerned, or by the market where trade union rates do not apply. In most cases, a realistic assessment of labour rates has been established by examining the circumstances of the particular sub-trade within the building industry. Material prices have been evaluated from building materials suppliers' lists. Average discounts are applied in order to establish a realistic market price for the materials to contractors.

1.4 Approach (continued)

The research carried out in this study identified some differences between the material quantities used in previous studies and quantities estimated in this study. However, in order to enable comparisons between 1987 estimated costs and previous years' costs on a consistent basis, previously indentified quantities were used to estimate 1987 construction costs.

The cost data are assembled by sub-trade and presented in 25 trade categories. The sub-trade operations are combined within each trade category in order to reflect current estimating practice within the industry. Site overhead and general contractor's office overhead and profit are shown separately to indicate the site costs.

A computer program was developed in order to collate and present the cost data which were assembled for the nine centres. The quantities and trade descriptions were initially established for the prototypical house and apartment building. The cost data applicable to the relevant quantities and trade descriptions for each centre were then processed by computer.

The cost effects of market forces and building industry conditions are addressed in the 'Commentary' section of this report.

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 1 : Total Building Costs

ITEM	EDMONTON		CALGARY		RED DEER		FORT McMURRAY		GRANDE PRAIRIE		HINTON		LETHBRIDGE		MEDICINE HAT		LLOYDMINSTER	
ELEMENT	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%
Labour	238,792	34.4	254,433	35.1	260,177	35.4	305,499	36.8	286,803	36.3	283,222	36.5	262,741	36.1	255,350	34.9	277,310	35.7
Material	454,724	65.6	470,068	64.9	473,862	64.6	525,402	63.2	504,352	63.7	493,300	63.5	465,953	63.9	476,078	65.1	500,148	64.3
Total 1987	693,517		724,502		734,041		830,902		791,155		776,523		728,692		731,429		777,454	
Cost per m2	$373.46		$390.15		$395.28		$447.44		$426.04		$418.16		$392.40		$393.88		$418.66	
Cost per SF	$34.70		$36.25		$36.72		$41.57		$39.58		$38.85		$36.46		$36.59		$38.89	
Total per Apt. 1987 $	$28,897		$30,188		$30,585		$34,621		$32,965		$32,355		$30,362		$30,476		$32,394	
Total 1986 $	648,534		647,135		665,963		778,075		742,644		731,043		679,312		676,195		730,802	
Total per Apt. 1986 $	27,022		26,964		27,748		32,420		30,944		30,460		28,305		28,175		30,450	
Changes From 1986	6.9%		12.0%		10.2%		6.8%		6.5%		6.2%		7.3%		8.2%		6.4%	

* Several total figures may appear as not added correctly. This is due to the rounding effect in the calculations of the detail costing for each centre.

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 2 : Comparative Cost Ratios *

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER
EDMONTON	1.00	1.04	1.06	1.20	1.14	1.12	1.05	1.05	1.12
CALGARY	0.96	1.00	1.01	1.15	1.09	1.07	1.01	1.01	1.07
RED DEER	0.94	0.99	1.00	1.13	1.08	1.06	0.99	1.00	1.06
FORT McMURRAY	0.83	0.87	0.88	1.00	0.95	0.93	0.88	0.88	0.94
GRANDE PRAIRIE	0.88	0.92	0.93	1.05	1.00	0.98	0.92	0.92	0.98
HINTON	0.89	0.93	0.95	1.07	1.02	1.00	0.94	0.94	1.00
LETHBRIDGE	0.95	0.99	1.01	1.14	1.09	1.07	1.00	1.00	1.07
MEDICINE HAT	0.95	0.99	1.00	1.14	1.08	1.06	1.00	1.00	1.06
LLOYD-MINSTER	0.89	0.93	0.94	1.07	1.02	1.00	0.94	0.94	1.00

* Entries refer to the ratio of the price for a city in the top row of the table divided by a price for the city listed in the column. For example, Red Deer costs are 1.06 times Edmonton costs.

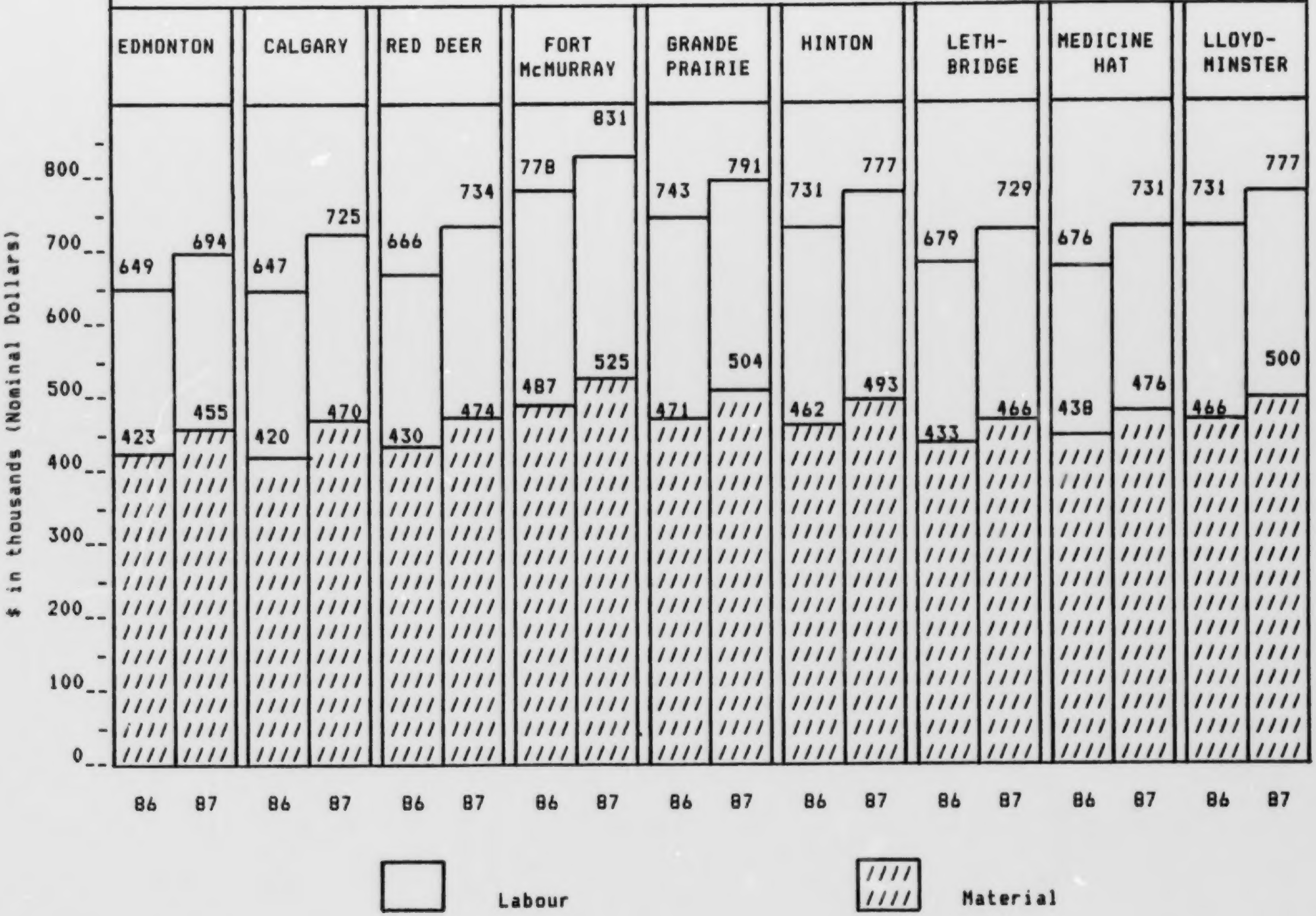
2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 3 : Comparative Cost Table 1986 - 1987

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER
Labour Cost									
1987	$238,792	$254,433	$260,177	$305,499	$286,803	$283,222	$262,741	$255,350	$277,310
1986	$225,545	$227,234	$236,381	$291,035	$271,867	$269,016	$246,730	$237,975	$264,811
Difference	$13,247	$27,199	$23,796	$14,464	$14,936	$14,206	$16,011	$17,375	$12,499
% Difference	5.9%	12.0%	10.1%	5.0%	5.5%	5.3%	6.5%	7.3%	4.7%
Mat'l Cost									
1987	$454,724	$470,068	$473,862	$525,402	$504,352	$493,300	$465,953	$476,078	$500,148
1986	$422,989	$419,901	$429,582	$487,040	$470,777	$462,027	$432,581	$438,220	$465,990
Difference	$31,735	$50,167	$44,280	$38,362	$33,575	$31,273	$33,372	$37,858	$34,158
% Difference	7.5%	11.9%	10.3%	7.9%	7.1%	6.8%	7.7%	8.6%	7.3%
Total Cost									
1987	$693,517	$724,502	$734,041	$830,902	$791,155	$776,523	$728,692	$731,429	$777,454
1986	$648,534	$647,135	$665,963	$778,075	$742,644	$731,043	$679,312	$676,195	$730,802
Difference	$44,983	$77,367	$68,078	$52,827	$48,511	$45,480	$49,380	$55,234	$46,652
% Difference	6.9%	12.0%	10.2%	6.8%	6.5%	6.2%	7.3%	8.2%	6.4%

2.0 SUMMARY OF FINDINGS FOR THE WALK - UP APARTMENT

TABLE WA. 4 : Comparative Building Cost Bar Chart 1986 - 1987



2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 5 : Comparative Total Building Costs 1980 -1987 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER
1980	$709,337	$660,295	$670,183	$685,282	$811,898	$736,435	-	$703,808	$697,459	-
1981	$756,703	$714,492	$719,003	$733,211	$861,728	$784,409	-	$740,084	$743,992	-
1982	$712,232	$665,273	$627,844	$710,485	$805,134	$700,436	$744,686	$720,280	$723,716	-
1983	$644,459	$603,046	$592,174	$623,852	$712,262	$669,574	$674,046	$632,872	$647,845	-
1984	$658,084	$600,039	$591,861	$624,342	$731,995	$694,794	$693,688	$632,121	$652,014	$701,901
1985	$669,882	$625,974	$617,049	$644,466	$734,420	$695,480	$690,526	$651,143	$655,347	$714,537
1986	$699,967	$648,534	$647,135	$665,963	$778,075	$742,644	$731,043	$679,312	$676,195	$730,802
1987	$754,246	$693,517	$724,502	$734,041	$830,902	$791,155	$776,523	$728,692	$731,429	$777,454

Notes : * Expressed in nominal dollars
** Hinton was not included in the 1980 and 1981 studies
*** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 6 : Comparative Cost per Square Foot of Gross Floor Area 1980 -1987 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER
1980	$35.48	$33.04	$33.52	$34.28	$40.61	$36.84	-	$35.20	$34.89	-
1981	$37.86	$35.75	$35.97	$36.68	$43.11	$39.24	-	$37.03	$37.22	-
1982	$35.63	$33.28	$31.41	$35.54	$40.28	$35.04	$37.26	$36.03	$36.21	-
1983	$32.24	$30.17	$29.63	$31.21	$35.63	$33.50	$33.72	$31.66	$32.41	-
1984	$32.92	$30.02	$29.61	$31.23	$36.62	$34.76	$34.70	$31.62	$32.62	$35.11
1985	$33.51	$31.32	$30.87	$32.24	$36.74	$34.79	$34.55	$32.58	$32.79	$35.75
1986	$35.02	$32.44	$32.37	$33.32	$38.93	$37.15	$36.57	$33.98	$33.83	$36.56
1987	$37.73	$34.70	$36.25	$36.72	$41.57	$39.58	$38.85	$36.46	$36.59	$38.89

Notes :
* Expressed in nominal dollars
** Hinton was not included in the 1980 and 1981 studies
*** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 7 : Comparative Cost per Apartment Unit 1980 -1987 *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER
1980	$29,555	$27,512	$27,924	$28,553	$33,829	$30,684	-	$29,325	$29,061	-
1981	$31,529	$29,771	$29,958	$30,550	$35,905	$32,684	-	$30,837	$31,000	-
1982	$29,677	$27,720	$26,160	$29,604	$33,547	$29,185	$31,029	$30,012	$30,155	-
1983	$26,853	$25,127	$24,674	$25,994	$29,678	$27,899	$28,085	$26,370	$26,994	-
1984	$27,420	$25,002	$24,661	$26,014	$30,500	$28,950	$28,904	$26,338	$27,167	$29,246
1985	$27,912	$26,082	$25,710	$26,853	$30,601	$28,978	$28,772	$27,131	$27,306	$29,772
1986	$29,165	$27,022	$26,964	$27,748	$32,420	$30,944	$30,460	$28,305	$28,175	$30,450
1987	$31,427	$28,897	$30,188	$30,585	$34,621	$32,965	$32,355	$30,362	$30,476	$32,394

Notes : * Expressed in nominal dollars
** Hinton was not included in the 1980 and 1981 studies
*** Lloydminster was not included in the 1980 through 1983 studies

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. B : Comparative Apartment Unit Cost Graphs 1980 -1987

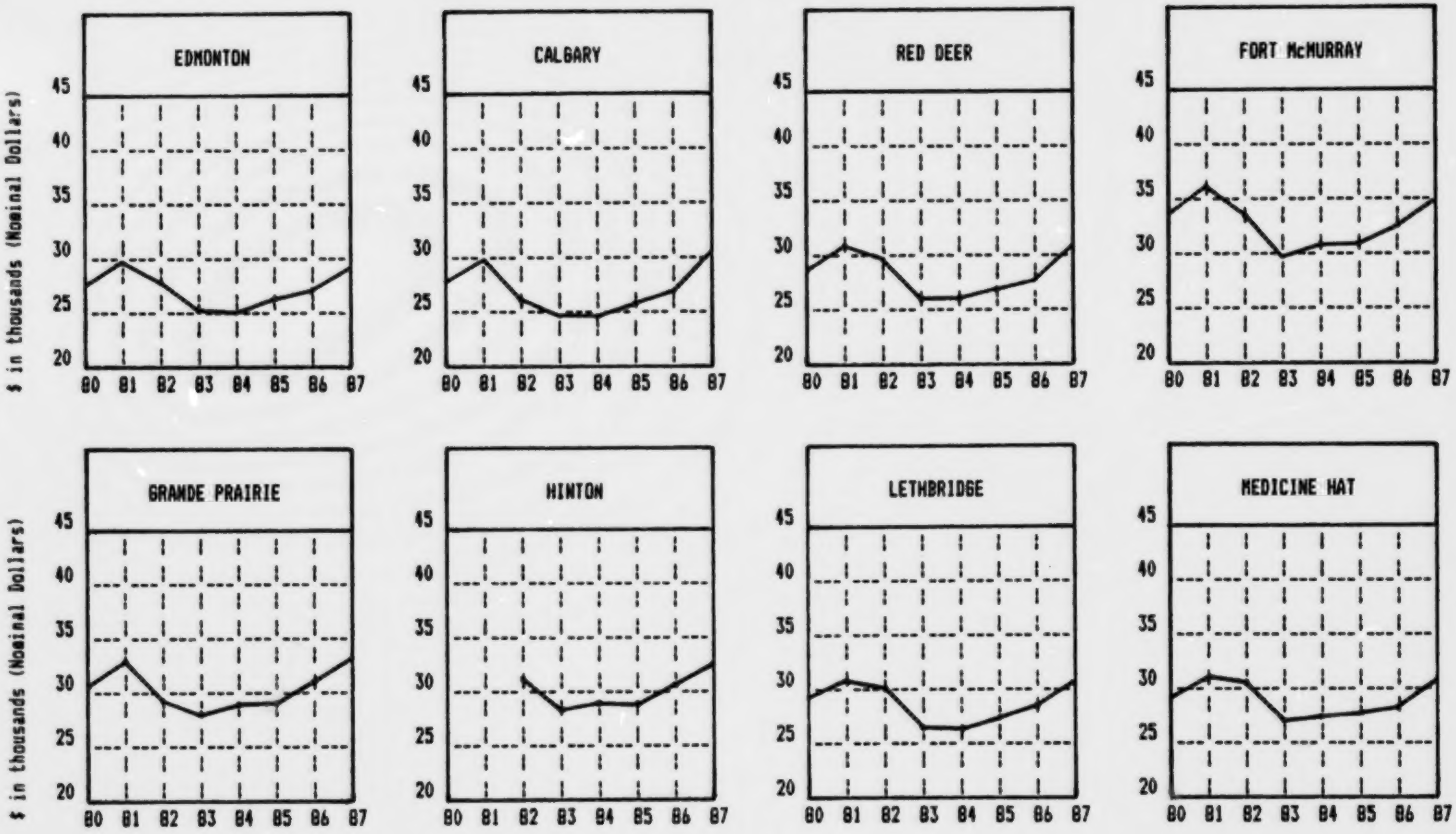
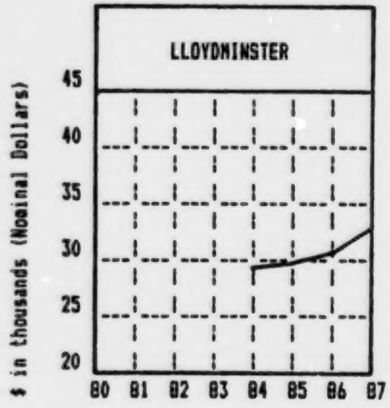


TABLE WA. B : Comparative Apartment Unit Cost Graphs 1980 -1987 (Continued)



2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

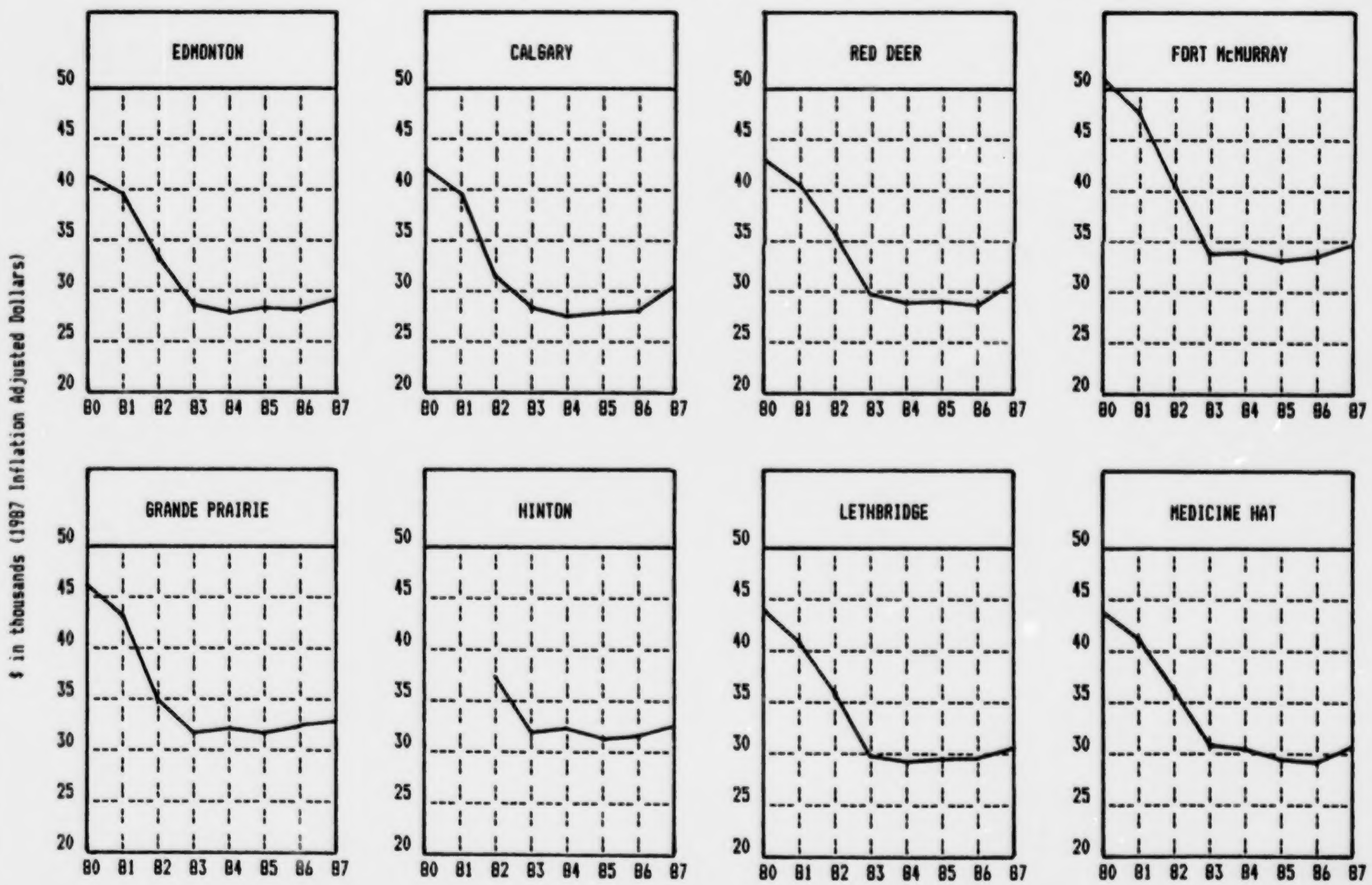
TABLE WA. 9 : Comparative Cost per Apartment Unit 1980 -1987 (Inflation Adjusted Dollars) *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER
1980	$44,244	$41,185	$41,802	$42,744	$50,642	$45,934	-	$43,900	$43,504	-
1981	$41,713	$39,387	$39,634	$40,418	$47,502	$43,241	-	$40,797	$41,013	-
1982	$35,523	$33,181	$31,314	$35,436	$40,156	$34,934	$37,142	$35,924	$36,096	-
1983	$30,531	$28,569	$28,054	$29,555	$33,744	$31,721	$31,933	$29,983	$30,692	-
1984	$30,436	$27,752	$27,374	$28,876	$33,855	$32,135	$32,083	$29,235	$30,155	$32,463
1985	$30,145	$28,169	$27,767	$29,001	$33,049	$31,296	$31,074	$29,301	$29,490	$32,154
1986	$30,303	$28,076	$28,016	$28,830	$33,684	$32,151	$31,648	$29,409	$29,274	$31,638
1987	$31,427	$28,897	$30,188	$30,585	$34,621	$32,965	$32,355	$30,362	$30,476	$32,394

Notes : * 1. Expressed in 1987 Inflation adjusted dollars
2. Inflation adjustments have been based on the Consumer Price Index for Edmonton and Calgary
** Hinton was not included in the 1980 and 1981 studies
*** Lloydminster was not included in the 1980 through 1983 studies

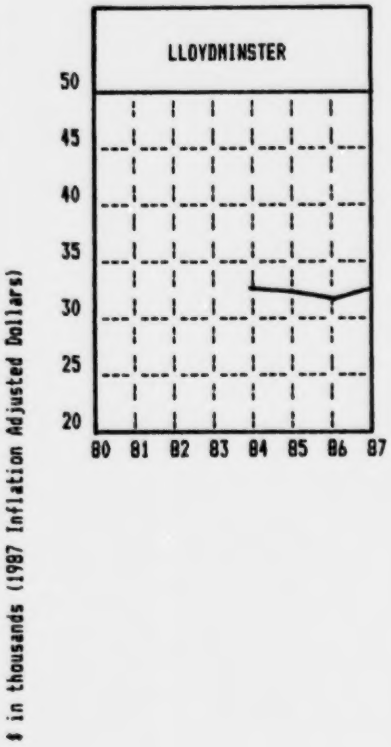
2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 10 : Comparative Apartment Unit Cost Graphs 1980 -1987 (Inflation Adjusted Dollars)



2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 10 : Comparative Apartment Unit Cost Graphs 1980 -1987 (Inflation Adjusted Dollars)



2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 11 : Trade Division Cost Summaries

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER
Divisions									
1. Excavation	2,545	4,188	3,391	3,968	3,360	2,805	3,593	3,065	3,631
2. Concrete	18,461	18,747	19,029	24,658	22,848	23,384	18,077	19,940	19,970
3. Damproofing	696	890	923	1,231	1,124	918	926	876	883
4. Siding	14,264	14,368	14,743	18,993	18,143	17,778	16,772	16,624	18,397
5. Roofing	24,385	25,611	26,104	33,586	27,496	26,939	25,188	25,732	28,633
6. Rough Carpentry	130,071	136,077	133,476	156,934	147,050	139,120	141,069	127,712	131,109
7. Finish Carpentry	9,012	9,502	9,833	10,587	9,949	9,304	9,377	9,587	9,412
8. Windows and Glazing	24,750	23,914	26,403	30,740	26,802	26,486	26,136	26,626	26,513
9. Sealants	827	888	850	912	877	860	817	853	877
10. Doors	39,494	38,551	40,133	42,149	43,142	42,906	40,843	39,554	43,055
11. Hardware	3,355	3,787	3,618	3,740	3,580	3,521	3,415	3,517	3,500
12. Ceramic Tiling	5,201	5,396	5,396	6,535	6,275	5,903	6,035	6,273	7,449
SUB - TOTAL	$273,061	$281,919	$283,899	$334,033	$310,646	$299,924	$292,248	$280,359	$293,429

2.0 SUMMARY OF FINDINGS FOR THE WALK-UP APARTMENT

TABLE WA. 11 : Trade Division Cost Summaries (cont'd)

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER
Divisions									
13. Wallboard	54,182	56,871	56,122	67,245	59,484	62,763	55,258	57,326	64,390
14. Flooring	44,880	46,903	48,598	53,459	48,797	48,060	47,337	48,251	49,172
15. Painting	19,244	18,961	21,394	23,484	21,926	22,593	22,493	23,558	22,859
16. Fitting	44,130	45,128	44,280	51,653	48,253	44,785	48,767	49,384	49,495
17. Specialties	16,336	16,932	16,828	18,824	18,190	17,462	16,691	17,111	17,430
18. Appliances	29,916	29,916	29,936	31,628	31,963	30,900	30,770	30,448	30,703
19. Plumbing	60,552	62,520	62,016	69,000	71,904	65,592	60,768	62,544	60,240
20. Heating	29,616	33,192	36,240	43,080	41,208	39,072	27,240	31,152	43,968
21. Ventilation	7,368	7,680	7,488	9,432	9,120	9,204	8,328	8,400	9,216
22. Fire Protection	2,040	2,040	2,040	2,616	2,592	2,592	2,040	2,040	2,616
23. Electrical	37,992	43,320	47,880	51,048	53,520	59,880	42,552	47,184	60,384
24. Site Overhead	49,000	49,000	49,000	49,000	49,000	49,000	49,000	49,000	49,000
Subtotals - 1-24	$668,317	$694,382	$705,721	$804,502	$766,603	$751,827	$703,492	$706,757	$752,902
25. Gnrl. Contr's Ovhd.& Profit	25,200	30,120	28,320	26,400	24,552	24,696	25,200	24,672	24,552
TOTAL	$693,517	$724,502	$734,041	$830,902	$791,155	$776,523	$728,692	$731,429	$777,454

3.0 COMMENTARY

3.0 COMMENTARY

3.1 General

Alberta's economy is experiencing slow to moderate growth as activity and optimism are climbing in the oil industry. Unemployment is down provincially and so are interest rates which may be causing more people to spend their dollars. Of course there are great variances from centre to centre within the Province. Housing starts in the Province increased, but again the variance between centres is great.

Costs for apartment construction have increased in all centres by an average of 7.8%. The greatest increase was 12.0% in Calgary and the smallest increase was 6.2% in Hinton.

The graphic presentation of apartment construction costs in Table WA.8 indicates that average costs are still less than 1981 costs expressed in nominal dollars (from $ 31,529 in 1981 to $ 31,427 in 1987 or 0.3% less). Expressed in inflation adjusted 1987 dollars, the total average costs are 24.7% less than the 1981 costs, from $41,713 in 1981 to $31,427 in 1987.

Labour costs for apartment construction increased substantially in Calgary and in Red Deer as both centres have experienced shortages of skilled labour. The other centres have also experienced some of the skilled labour shortage problems, but to a much lesser degree.

3.0 COMMENTARY

3.1 General (continued)

Material prices for the walk-up apartment building have increased in all centres, notably lumber, siding, and roofing which have increased significantly over the last year. Most materials have probably increased in price in response to overall high demand caused by the highest housing starts in Canada in ten years. Most of the increased starts occurred in central Canada and British Columbia. Concrete prices continue to vary considerably from centre to centre, due to demand, location and availability of aggregates and cement. In most centres the majority of price increases were passed on to consumers ; in previous years, builders absorbed some increases to remain competitive in the marketplace.

No significant changes were observed as a result of building practice changes or changes in standard materials used by the majority of builders.

3.0 COMMENTARY

3.2 Highlights by Centre

Edmonton :

The 1987 cost of the typical walk-up apartment in Edmonton is 4.3% lower than its Calgary counterpart and 6.9% higher than the 1986 Edmonton cost. Expressed in nominal dollars, the total cost is lower by 2.9% than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 26.6% less than the 1981 cost. The overall increase in labour cost was 5.9% and the increase in material prices was 7.5% compared with 1986.

Shortages of skilled labour in Edmonton have started to force prices to rise. Lower profit margins are being realized for some builders as they strive to remain competitive in the marketplace.

Calgary :

The 1987 cost of the typical walk-up apartment in Calgary is 4.5% higher than its Edmonton counterpart and 12.0% higher than the 1986 Calgary cost. Expressed in nominal dollars, the total cost is 0.8% more than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 23.8% less than the 1981 cost. The overall increase in labour and material prices was 12.0% and 11.9% respectively compared with 1986.

Shortages of skilled labour and materials in Calgary pushed costs upwards substantially in a very active marketplace. One should note that this demand took place mostly in the mid to upper price range. Recent optimism amd increased oil industry activity coupled with lower interest rates are believed to have been major contributors to the increased demand.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Red Deer :

The 1987 cost of the typical walk-up apartment in Red Deer is 1.3% higher than in Calgary and 4.5% than in Edmonton. The cost is 10.2% higher than the 1986 Red Deer cost. Expressed in nominal dollars, the total cost is 0.1% more than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 24.3% less than the 1981 cost. The overall increase in labour cost was 10.1% and the increase in material prices was 10.3% compared with 1986.

Red Deer costs have probably been influenced by the active Calgary market, particularly on the labour side.

Fort McMurray :

The 1987 cost of the typical walk-up apartment in Fort McMurray is 19.8% higher than that in Edmonton and 6.8% higher than the 1986 Fort McMurray cost. Expressed in nominal dollars, the total cost is 3.6% less than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the cost is 27.1% less than the 1981 cost. The overall increase in labour and material prices was 5.0% and 7.9% respectively compared with 1986.

Fort McMurray has experienced low levels of construction activity. Higher transportation costs are also a significant factor affecting material costs.

3.0 COMMENTARY

Highlights by Centre (continued)

Grande Prairie :

The 1987 cost of the typical walk-up apartment in Grande Prairie is 14.1% higher than in Edmonton and 6.5% higher than the 1986 Grande Prairie cost. Expressed in nominal dollars, the total cost is 0.9% more than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 23.8% less than the 1981 cost. The overall increase in labour and material prices was 5.5% and 7.1% respectively compared with 1986.

Grande Prairie has experienced steady growth in residential markets in the past year.

Hinton :

The 1987 cost of the typical walk-up apartment in Hinton is 12.0% higher than in Edmonton and 6.2% higher than the 1986 Hinton cost. Expressed in nominal dollars, the total cost is 4.3% higher than the 1982* cost. Expressed in inflation adjusted 1987 dollars, the total cost is 12.9% less than the 1982* cost. The overall increase in labour and material prices was 5.3% and 6.8% respectively compared with 1986.

Of the nine centres examined, Hinton is the smallest. Apart from the premiums on materials, skilled labour is not as readily available as elsewhere. Therefore, it is often necessary to pay certain skilled trades, such as mechanical and electrical, subsistence in the form of accommodation and travel allowances.

Hinton had very little new residential construction in 1987.

* 1982 has been selected as the base year as Hinton was not part of earlier studies.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Lethbridge :

The 1987 cost of the typical walk-up apartment in Lethbridge is 0.6% higher than in Calgary and 7.3% higher than the 1986 Lethbridge cost. Expressed in nominal dollars, the total cost is 1.5% less than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 25.6% less than the 1981 cost. The overall increase in labour and material prices was 6.5% and 7.7% respectively compared with 1986.

Lethbridge has experienced a competitive market through 1987. Along with higher material costs, builders are having to pay skilled labour more.

Medicine Hat :

The 1987 cost of the typical walk-up apartment in Medicine Hat is 1.0% higher than in Calgary and 8.2% higher than the 1986 Medicine Hat cost. Expressed in nominal dollars, the total cost is 1.7% less than the 1981 cost. Expressed in inflation adjusted 1987 dollars, the total cost is 25.7% less than the 1981 cost. The overall increase in labour cost was 7.3% and the increase in material prices was 8.6% compared with 1986.

As with Lethbridge, builders here must pay more for skilled labour, along with slightly higher material costs.

3.2 Highlights by Centre (continued)

Lloydminster :

The 1987 cost of the typical walk-up apartment in Lloydminster is 12.1% higher than in Edmonton and 6.4% higher than the 1986 Lloydminster cost. Expressed in nominal dollars, the total cost is 10.8% higher than the 1984* cost. Expressed in inflation adjusted 1987 dollars, the total cost is 0.2% less than the 1984 cost. The overall increase in labour cost was 4.7% and the increase in material price was 7.3% compared with 1986.

As in Hinton, Lloydminster experienced a slow year with little residential construction activity.

* 1984 has been selected as the base year as Lloydminster was not part of the earlier studies.

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE

DETAILED COST ESTIMATES FOR EDMONTON

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.45	401	0.84	748	1.29	1,149
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.40	75	0.77	145	1.17	220
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.05	214	6.30	441	9.35	655
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.80	401	0.24	120	1.04	521
	SUBTOTAL - EXCAVATION	1.37	/m2 GFA		1,090		1,454		2,545
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	99.00	5,742	99.00	5,742
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.66	1,090	0.66	1,090
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.98	1,328	1.87	415	7.85	1,743

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96 m	17.30	1,661	5.81	558	23.11	2,219
2.40	90 mm concrete (20 MPa) in slab on grade.	456 m2	3.56	1,623	7.97	3,634	11.53	5,258
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456 m2	0.00	0	3.03	1,382	3.03	1,382
2.55	38 mm thick rigid insulation to concrete wall (basement).	117 m2	2.07	242	3.96	463	6.03	706
2.60	Parging to concrete walls.	29 m2	8.35	242	2.77	80	11.12	322
	SUBTOTAL - CONCRETE	9.94 /m2 GFA		5,096		13,365		18,461
3.	DAMPROOFING							
3.10	Two coats asphaltic emulsion on concrete walls.	159 m2	0.27	43	0.28	45	0.55	87
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96 m	2.63	252	3.71	356	6.34	609
	SUBTOTAL - DAMPROOFING	0.37 /m2 GFA		295		401		696
4.	SIDING							
4.10	Prefinished aluminum siding	98 m2	4.72	463	14.86	1,456	19.58	1,919

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.71	497	1.12	784	1.83	1,281
4.50	Stucco on wire mesh incl. building paper.	678 m2	10.05	6,814	5.07	3,437	15.12	10,251
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	4.37	258	9.40	555	13.77	812
	SUBTOTAL - SIDING	7.68 /m2 GFA		8,031		6,232		14,264
5.	ROOFING/SHEET METAL							
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	19.33	10,187	16.22	8,548	35.55	18,735
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.64	864	7.97	4,200	9.61	5,064
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.25	145	0.28	162	0.53	307
5.50	Prefinished flashing over window.	66 m	1.34	88	2.88	190	4.22	279
	SUBTOTAL - ROOFING/SHEET METAL	13.13 /m2 GFA		11,285		13,101		24,385
6.	CARPENTRY (ROUGH)							
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	771.23	29,307	771.23	29,307

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0	MFBM	0.00	0	578.90	25,472	578.90	25,472
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070	m2	0.00	0	8.22	33,455	8.22	33,455
6.40	Labour Only - complete framing including installation of windows.	1,857	m2	22.47	41,727	0.00	0	22.47	41,727
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99	m	0.42	42	0.70	69	1.12	111
	SUBTOTAL - CARPENTRY (ROUGH)	70.04	/m2 GFA		41,768		88,303		130,071

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.	CARPENTRY (FINISH)								
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2	No.	507.00	1,014	370.00	740	877.00	1,754
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314	m	1.10	3,645	1.09	3,612	2.19	7,258
	SUBTOTAL - CARPENTRY (FINISH)	4.85	/m2 GFA		4,659		4,352		9,012
8.	WINDOWS AND GLAZING								
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18	No.	0.00	0	835.00	15,030	835.00	15,030
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4	No.	0.00	0	840.00	3,360	840.00	3,360
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6	No.	0.00	0	238.00	1,428	238.00	1,428

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28	No.	0.00	0	162.00	4,536	162.00	4,536
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3	No.	0.00	0	132.00	396	132.00	396
SUBTOTAL - WINDOWS AND GLAZING	13.33	/m2 GFA		0		24,750		24,750
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725	m	0.39	283	0.25	181	0.64	464
9.20 Caulk (interior) - ceramic tile	227	m	1.03	234	0.57	129	1.60	363
SUBTOTAL - SEALANTS	0.45	/m2 GFA		517		311		827
10. Doors								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3	No	235.00	705	1,560.00	4,680	1,795.00	5,385

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No.	190.00	1,520	1,102.00	8,816	1,292.00	10,336
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50	No.	21.50	1,075	194.00	9,700	215.50	10,775
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1	No.	21.50	22	241.00	241	262.50	263
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48	No.	11.75	564	41.25	1,980	53.00	2,544
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	21.50	22	205.00	205	226.50	227

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	11.75	917	116.00	9,048	127.75	9,965
SUBTOTAL - DOORS	21.27	/m2 GFA		4,824		34,670		39,494
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	11.00	275	23.40	585	34.40	860
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	7.20	583	10.70	867	17.90	1,450
11.40 Bathroom privacy latch sets.	24	set	7.20	173	12.84	308	20.04	481
11.50 Door closers (rated).	14	No.	13.00	182	27.32	382	40.32	564
SUBTOTAL - HARDWARE	1.81	/m2 GFA		1,213		2,142		3,355
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	21.00	2,877	16.96	2,324	37.96	5,201
SUBTOTAL - CERAMIC TILING	2.80	/m2 GFA		2,877		2,324		5,201

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	2.43	9,492	1.96	7,656	4.39	17,147
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	2.64	1,938	2.42	1,776	5.06	3,714
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	2.64	1,286	2.95	1,437	5.59	2,722
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	4.84	305	3.16	199	8.00	504
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	3.78	7,133	3.39	6,397	7.17	13,530
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	5.50	22	6.74	27	12.24	49
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	4.00	2,096	2.99	1,567	6.99	3,663
13.40 Finish to ceilings - textured	1,425 m2	1.12	1,596	1.05	1,496	2.17	3,092

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.25	337	0.28	377	0.53	713
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.80	582	4.73	3,443	5.53	4,026
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.80	726	4.73	4,295	5.53	5,021
SUBTOTAL - WALLBOARD	29.18 /m2 GFA		25,512		28,670		54,182
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.51	2,006	11.70	4,259	17.21	6,264
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.15	4,082	13.49	17,483	16.64	21,565
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	16.00	1,072	21.20	1,420	37.20	2,492
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.17	9,593	3.71	4,964	10.88	14,557
SUBTOTAL - FLOORING	24.17 /m2 GFA		16,754		28,126		44,880
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	4.02	105	1.15	30	5.17	134

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783	m	1.39	1,088	0.90	705	2.29	1,793
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196	m2	1.75	9,093	0.63	3,273	2.38	12,366
15.30 Two coats urethane varnish on doors and frames.	105	No.	19.60	2,058	5.70	599	25.30	2,657
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328	m	0.72	1,676	0.16	372	0.88	2,049
15.50 Prepare, prime, one coat semigloss on shelving.	94	m2	2.18	205	0.42	39	2.60	244
SUBTOTAL - PAINTING	10.36	/m2 GFA		14,225		5,019		19,244
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.40	364	5.36	574	8.76	937

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	28.50	5,558	193.00	37,635	221.50	43,193
SUBTOTAL - FITTINGS	23.76 /m2 GFA		5,921		38,209		44,130
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	4.75	456	8.56	822	13.31	1,278
17.20 Medicine cabinet	24 No.	9.30	223	35.70	857	45.00	1,080
17.30 25 mm dia. chrome shower curtain rod.	24 No.	5.15	124	6.30	151	11.45	275
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	57.75	58	378.00	378	435.75	436
17.50 18 mm dia. chrome coat rods.	24 No.	3.10	74	5.15	124	8.25	198
17.60 Drapery tracks.	102 m	3.14	320	8.35	852	11.49	1,172

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98 m	10.50	1,029	42.00	4,116	52.50	5,145
17.80 Metal balustrade to stairs c/w vinyl cap.	66 m	10.50	693	37.00	2,442	47.50	3,135
17.90 50 mm dia. pipe handrail and brackets.	54 m	23.00	1,242	44.00	2,376	67.00	3,618
SUBTOTAL - SPECIALTIES	8.80 /m2 GFA		4,219		12,117		16,336
18. APPLIANCES							
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24 No.	15.50	372	515.00	12,360	530.50	12,732
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24 No.	15.50	372	479.00	11,496	494.50	11,868
18.30 Range hood	24 No.	15.50	372	91.00	2,184	106.50	2,556
18.40 Coin operated dryer.	2 No.	15.50	31	587.00	1,174	602.50	1,205
18.50 Coin operated washer.	2 No.	15.50	31	762.00	1,524	777.50	1,555
SUBTOTAL - APPLIANCES	16.11 /m2 GFA		1,178		28,738		29,916

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24 apt.	648.00	15,552	1,875.00	45,000	2,523.00	60,552
SUBTOTAL - PLUMBING	32.61 /m2 GFA		15,552		45,000		60,552
20. HEATING							
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24 apt.	374.00	8,976	860.00	20,640	1,234.00	29,616
SUBTOTAL - HEATING	15.95 /m2 GFA		8,976		20,640		29,616

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	76.00	1,824	231.00	5,544	307.00	7,368
SUBTOTAL - VENTILATION	3.97 /m2 GFA		1,824		5,544		7,368
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	29.00	696	56.00	1,344	85.00	2,040
SUBTOTAL - FIRE PROTECTION	1.10 /m2 GFA		696		1,344		2,040
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	543.00	13,032	1,040.00	24,960	1,583.00	37,992
SUBTOTAL - ELECTRICAL	20.46 /m2 GFA		13,032		24,960		37,992

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS								
24.10 Site Overheads								
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.	24	apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39	/m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit								
- permits								
- bonds								
- insurance								
- office overhead								
- profit	24	apt.	695.00	16,680	355.00	8,520	1,050.00	25,200
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.57	/m2 GFA		16,680		8,520		25,200
TOTAL - EDMONTON	373.46	/m2 GFA		238,792		454,724		693,517

DETAILED COST ESTIMATES FOR CALGARY

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.52	463	1.80	1,604	2.32	2,067
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.40	75	1.36	256	1.76	331
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.40	238	14.16	991	17.56	1,229
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.88	441	0.24	120	1.12	561
	SUBTOTAL - EXCAVATION	2.26	/m2 GFA		1,217		2,971		4,188
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	101.00	5,858	101.00	5,858
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.74	1,222	0.74	1,222
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.74	1,274	1.98	440	7.72	1,714

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.51	1,585	6.80	653	23.31	2,238
2.40	90 mm concrete (20 MPa) in slab on grade.	456	m2	3.68	1,678	7.78	3,548	11.46	5,226
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456	m2	0.00	0	3.03	1,382	3.03	1,382
2.55	38 mm thick rigid insulation to concrete wall (basement).	117	m2	2.08	243	4.21	493	6.29	736
2.60	Parging to concrete walls.	29	m2	9.45	274	3.35	97	12.80	371
	SUBTOTAL - CONCRETE	10.10	/m2 GFA		5,055		13,692		18,747
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	159	m2	0.40	64	0.34	54	0.74	118
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96	m	4.00	384	4.04	388	8.04	772
	SUBTOTAL - DAMPROOFING	0.48	/m2 GFA		448		442		890
4.	SIDING								
4.10	Prefinished aluminum siding	98	m2	5.03	493	12.45	1,220	17.48	1,713

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700	FBM	0.73	511	1.29	903	2.02	1,414
4.50	Stucco on wire mesh incl. building paper.	678	m2	10.27	6,963	5.10	3,458	15.37	10,421
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59	m2	4.45	263	9.45	558	13.90	820
	SUBTOTAL - SIDING	7.74	/m2 GFA		8,230		6,138		14,368
5.	ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527	m2	20.50	10,804	17.30	9,117	37.80	19,921
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527	m2	1.63	859	7.90	4,163	9.53	5,022
5.40	.102 mm polyethylene vapour barrier.	580	m2	0.33	191	0.34	197	0.67	389
5.50	Prefinished flashing over window.	66	m	1.36	90	2.88	190	4.24	280
	SUBTOTAL - ROOFING/SHEET METAL	13.79	/m2 GFA		11,944		13,668		25,611
6.	CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0	MFBM	0.00	0	800.00	30,400	800.00	30,400

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	592.00	26,048	592.00	26,048
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	8.86	36,060	8.86	36,060
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	23.40	43,454	0.00	0	23.40	43,454
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.44	44	0.72	71	1.16	115
	SUBTOTAL - CARPENTRY (ROUGH)	73.28 /m2 GFA		43,497		92,579		136,077

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.	CARPENTRY (FINISH)							
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	557.00	1,114	383.00	766	940.00	1,880
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.12	3,712	1.18	3,911	2.30	7,622
	SUBTOTAL - CARPENTRY (FINISH)	5.12 /m2 GFA		4,826		4,677		9,502
8.	WINDOWS AND GLAZING							
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No..	0.00	0	784.00	14,112	784.00	14,112
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	836.00	3,344	836.00	3,344
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	244.00	1,464	244.00	1,464

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28 No.	0.00	0	164.00	4,592	164.00	4,592
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3 No.	0.00	0	134.00	402	134.00	402
SUBTOTAL - WINDOWS AND GLAZING	12.88 /m2 GFA		0		23,914		23,914
9. SEALANTS							
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725 m	0.41	297	0.27	196	0.68	493
9.20 Caulk (interior) - ceramic tile	227 m	1.14	259	0.60	136	1.74	395
SUBTOTAL - SEALANTS	0.48 /m2 GFA		556		332		888
10. Doors							
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3 No	216.00	648	1,477.00	4,431	1,693.00	5,079

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No.	180.00	1,440	1,052.00	8,416	1,232.00	9,856
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50	No.	20.00	1,000	184.00	9,200	204.00	10,200
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1	No.	20.00	20	226.00	226	246.00	246
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48	No.	12.00	576	41.68	2,001	53.68	2,577
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	20.00	20	199.00	199	219.00	219

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	12.00	936	121.00	9,438	133.00	10,374
SUBTOTAL - DOORS	20.76	/m2 GFA		4,640		33,911		38,551
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	14.00	350	24.78	620	38.78	970
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	9.00	729	11.90	964	20.90	1,693
11.40 Bathroom privacy latch sets.	24	set	9.00	216	13.65	328	22.65	544
11.50 Door closers (rated).	14	No.	14.00	196	27.50	385	41.50	581
SUBTOTAL - HARDWARE	2.04	/m2 GFA		1,491		2,296		3,787
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	22.00	3,014	17.39	2,382	39.39	5,396
SUBTOTAL - CERAMIC TILING	2.91	/m2 GFA		3,014		2,382		5,396

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906	m2	2.50	9,765	2.25	8,789	4.75	18,554
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734	m2	2.74	2,011	2.40	1,762	5.14	3,773
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487	m2	2.74	1,334	3.17	1,544	5.91	2,878
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63	m2	4.92	310	3.18	200	8.10	510
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887	m2	3.81	7,189	3.39	6,397	7.20	13,586
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4	m2	5.60	22	6.82	27	12.42	50
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	3.70	1,939	2.96	1,551	6.66	3,490
13.40 Finish to ceilings - textured	1,425	m2	1.17	1,667	1.12	1,596	2.29	3,263

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.33	444	0.34	458	0.67	902
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	1.05	764	4.98	3,625	6.03	4,390
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	1.05	953	4.98	4,522	6.03	5,475
SUBTOTAL - WALLBOARD	30.63 /m2 GFA		26,400		30,470		56,871
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.86	2,133	12.04	4,383	17.90	6,516
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.60	4,666	14.50	18,792	18.10	23,458
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	16.00	1,072	21.20	1,420	37.20	2,492
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.17	9,593	3.62	4,844	10.79	14,437
SUBTOTAL - FLOORING	25.26 /m2 GFA		17,464		29,439		46,903
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	3.93	102	1.10	29	5.03	131

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783	m	1.35	1,057	0.85	666	2.20	1,723
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196	m2	1.78	9,249	0.63	3,273	2.41	12,522
15.30 Two coats urethane varnish on doors and frames.	105	No.	19.25	2,021	5.35	562	24.60	2,583
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328	m	0.64	1,490	0.12	279	0.76	1,769
15.50 Prepare, prime, one coat semigloss on shelving.	94	m2	2.08	196	0.40	38	2.48	233
SUBTOTAL - PAINTING	10.21	/m2 GFA		14,115		4,846		18,961
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	4.11	440	5.60	599	9.71	1,039

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195	m	29.10	5,675	197.00	38,415	226.10	44,090
SUBTOTAL - FITTINGS	24.30	/m2 GFA		6,114		39,014		45,128
17. SPECIALTIES								
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96	No.	6.46	620	8.80	845	15.26	1,465
17.20 Medicine cabinet	24	No.	12.00	288	36.72	881	48.72	1,169
17.30 25 mm dia. chrome shower curtain rod.	24	No.	5.00	120	6.50	156	11.50	276
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1	set	58.40	58	384.00	384	442.40	442
17.50 18 mm dia. chrome coat rods.	24	No.	4.25	102	5.50	132	9.75	234
17.60 Drapery tracks.	102	m	3.28	335	8.55	872	11.83	1,207

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98 m	11.00	1,078	42.50	4,165	53.50	5,243
17.80 Metal balustrade to stairs c/w vinyl cap.	66 m	11.00	726	38.00	2,508	49.00	3,234
17.90 50 mm dia. pipe handrail and brackets.	54 m	23.50	1,269	44.30	2,392	67.80	3,661
SUBTOTAL - SPECIALTIES	9.12 /m2 GFA		4,596		12,335		16,932
18. APPLIANCES							
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24 No.	15.50	372	515.00	12,360	530.50	12,732
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24 No.	15.50	372	479.00	11,496	494.50	11,868
18.30 Range hood	24 No.	15.50	372	91.00	2,184	106.50	2,556
18.40 Coin operated dryer.	2 No.	15.50	31	587.00	1,174	602.50	1,205
18.50 Coin operated washer.	2 No.	15.50	31	762.00	1,524	777.50	1,555
SUBTOTAL - APPLIANCES	16.11 /m2 GFA		1,178		28,738		29,916

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24	apt.	685.00	16,440	1,920.00	46,080	2,605.00	62,520
SUBTOTAL - PLUMBING	33.67	/m2 GFA		16,440		46,080		62,520
20. HEATING								
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt.	450.00	10,800	933.00	22,392	1,383.00	33,192
SUBTOTAL - HEATING	17.87	/m2 GFA		10,800		22,392		33,192

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	86.00	2,064	234.00	5,616	320.00	7,680
SUBTOTAL - VENTILATION	4.14 /m2 GFA		2,064		5,616		7,680
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	29.00	696	56.00	1,344	85.00	2,040
SUBTOTAL - FIRE PROTECTION	1.10 /m2 GFA		696		1,344		2,040
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	705.00	16,920	1,100.00	26,400	1,805.00	43,320
SUBTOTAL - ELECTRICAL	23.33 /m2 GFA		16,920		26,400		43,320

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS								
24.10 Site Overheads								
- setup								
- supervision								
- plant								
- site office								
- small tools								
- security								
- boarding, etc.	24	apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39	/m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit								
- permits								
- bonds								
- insurance								
- office overhead								
- profit	24	apt.	840.00	20,160	415.00	9,960	1,255.00	30,120
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	16.22	/m2 GFA		20,160		9,960		30,120
TOTAL - CALGARY	390.15	/m2 GFA		254,433		470,068		724,502

DETAILED COST ESTIMATES FOR RED DEER

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.48	428	1.25	1,114	1.73	1,541
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.39	73	0.75	141	1.14	214
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.46	242	11.67	817	15.13	1,059
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.91	456	0.24	120	1.15	576
	SUBTOTAL - EXCAVATION	1.83	/m2 GFA		1,199		2,192		3,391
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	97.23	5,639	97.23	5,639
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.71	1,173	0.71	1,173
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.79	1,285	2.98	662	8.77	1,947

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96 m	16.62	1,596	9.16	879	25.78	2,475
2.40	90 mm concrete (20 MPa) in slab on grade.	456 m2	3.91	1,783	7.76	3,539	11.67	5,322
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456 m2	0.00	0	3.03	1,382	3.03	1,382
2.55	38 mm thick rigid insulation to concrete wall (basement).	117 m2	2.06	241	4.09	479	6.15	720
2.60	Parging to concrete walls.	29 m2	9.74	282	3.10	90	12.84	372
	SUBTOTAL - CONCRETE	10.25 /m2 GFA		5,187		13,842		19,029
3.	DAMPROOFING							
3.10	Two coats asphaltic emulsion on concrete walls.	159 m2	0.42	67	0.38	60	0.80	127
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96 m	4.13	396	4.16	399	8.29	796
	SUBTOTAL - DAMPROOFING	0.50 /m2 GFA		463		460		923
4.	SIDING							
4.10	Prefinished aluminum siding	98 m2	7.12	698	14.86	1,456	21.98	2,154

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.73	511	1.16	812	1.89	1,323
4.50	Stucco on wire mesh incl. building paper.	678 m2	10.27	6,963	5.10	3,458	15.37	10,421
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	4.87	287	9.45	558	14.32	845
	SUBTOTAL - SIDING	7.94 /m2 GFA		8,459		6,284		14,743
5. ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	20.50	10,804	18.27	9,628	38.77	20,432
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.63	859	7.90	4,163	9.53	5,022
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.29	168	0.32	186	0.61	354
5.50	Prefinished flashing over window.	66 m	1.55	102	2.94	194	4.49	296
	SUBTOTAL - ROOFING/SHEET METAL	14.06 /m2 GFA		11,933		14,171		26,104
6. CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	800.00	30,400	800.00	30,400

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	592.00	26,048	592.00	26,048
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	8.86	36,060	8.86	36,060
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	22.00	40,854	0.00	0	22.00	40,854
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.44	44	0.71	70	1.15	114
	SUBTOTAL - CARPENTRY (ROUGH)	71.88 /m2 GFA		40,898		92,578		133,476

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7. CARPENTRY (FINISH)							
7.10 Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	507.00	1,014	383.00	766	890.00	1,780
7.30 Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.24	4,109	1.19	3,944	2.43	8,053
SUBTOTAL - CARPENTRY (FINISH)	5.30 /m2 GFA		5,123		4,710		9,833
8. WINDOWS AND GLAZING							
8.10 Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	904.00	16,272	904.00	16,272
8.20 Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	875.00	3,500	875.00	3,500
8.30 Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	248.00	1,488	248.00	1,488

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40	Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28	No.	0.00	0	169.00	4,732	169.00	4,732
8.50	Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3	No.	0.00	0	137.00	411	137.00	411
	SUBTOTAL - WINDOWS AND GLAZING	14.22	/m2 GFA		0		26,403		26,403
9.	SEALANTS								
9.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725	m	0.39	283	0.26	189	0.65	471
9.20	Caulk (interior) - ceramic tile	227	m	1.09	247	0.58	132	1.67	379
	SUBTOTAL - SEALANTS	0.46	/m2 GFA		530		320		850
10.	Doors								
10.03	Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3	No	235.00	705	1,575.00	4,725	1,810.00	5,430

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	200.00	1,600	1,110.00	8,880	1,310.00	10,480
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	22.50	1,125	197.00	9,850	219.50	10,975
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	22.50	23	244.00	244	266.50	267
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	12.00	576	43.67	2,096	55.67	2,672
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	22.50	23	205.00	205	227.50	228

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78 No.	12.25	956	117.00	9,126	129.25	10,082
SUBTOTAL - DOORS	21.61 /m2 GFA		5,007		35,126		40,133
11. HARDWARE							
11.15 Lock sets to interior doors.	25 set	12.00	300	24.78	620	36.78	920
11.25 Butts to interior doors. (included with frames)	129 pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81 set	8.00	648	11.90	964	19.90	1,612
11.40 Bathroom privacy latch sets.	24 set	8.00	192	13.65	328	21.65	520
11.50 Door closers (rated).	14 No.	13.00	182	27.50	385	40.50	567
SUBTOTAL - HARDWARE	1.95 /m2 GFA		1,322		2,296		3,618
12. CERAMIC TILING							
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137 m2	22.00	3,014	17.39	2,382	39.39	5,396
SUBTOTAL - CERAMIC TILING	2.91 /m2 GFA		3,014		2,382		5,396

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	2.50	9,765	2.06	8,046	4.56	17,811
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	2.74	2,011	2.40	1,762	5.14	3,773
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	2.74	1,334	3.17	1,544	5.91	2,878
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	4.92	310	3.18	200	8.10	510
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	3.81	7,189	3.39	6,397	7.20	13,586
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	5.60	22	6.82	27	12.42	50
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	4.40	2,306	2.96	1,551	7.36	3,857
13.40 Finish to ceilings - textured	1,425 m2	1.22	1,739	1.14	1,625	2.36	3,363

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.29	390	0.32	431	0.61	821
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.87	633	4.92	3,582	5.79	4,215
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.87	790	4.92	4,467	5.79	5,257
SUBTOTAL - WALLBOARD	30.22 /m2 GFA		26,490		29,632		56,122
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.63	2,049	11.94	4,346	17.57	6,395
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.60	4,666	14.69	19,038	18.29	23,704
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	17.75	1,189	22.70	1,521	40.45	2,710
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.80	10,436	4.00	5,352	11.80	15,788
SUBTOTAL - FLOORING	26.17 /m2 GFA		18,341		30,257		48,598
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	4.16	108	1.24	32	5.40	140

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783	m	1.49	1,167	0.93	728	2.42	1,895
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196	m2	2.06	10,704	0.72	3,741	2.78	14,445
15.30 Two coats urethane varnish on doors and frames.	105	No.	20.30	2,132	6.34	666	26.64	2,797
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328	m	0.66	1,536	0.14	326	0.80	1,862
15.50 Prepare, prime, one coat semigloss on shelving.	94	m2	2.26	212	0.45	42	2.71	255
SUBTOTAL - PAINTING	11.52	/m2 GFA		15,859		5,535		21,394
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.78	404	5.47	585	9.25	990

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	31.00	6,045	191.00	37,245	222.00	43,290
SUBTOTAL - FITTINGS	23.84 /m2 GFA		6,449		37,830		44,280
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	5.95	571	8.79	844	14.74	1,415
17.20 Medicine cabinet	24 No.	10.00	240	36.72	881	46.72	1,121
17.30 25 mm dia. chrome shower curtain rod.	24 No.	5.50	132	6.50	156	12.00	288
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	58.40	58	384.00	384	442.40	442
17.50 18 mm dia. chrome coat rods.	24 No.	3.50	84	5.50	132	9.00	216
17.60 Drapery tracks.	102 m	3.28	335	8.55	872	11.83	1,207

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98 m	11.00	1,078	42.50	4,165	53.50	5,243
17.80 Metal balustrade to stairs c/w vinyl cap.	66 m	11.00	726	38.00	2,508	49.00	3,234
17.90 50 mm dia. pipe handrail and brackets.	54 m	23.50	1,269	44.30	2,392	67.80	3,661
SUBTOTAL - SPECIALTIES	9.06 /m2 GFA		4,493		12,334		16,828
18. APPLIANCES							
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24 No.	15.50	372	515.00	12,360	530.50	12,732
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24 No.	15.50	372	479.00	11,496	494.50	11,868
18.30 Range hood	24 No.	15.50	372	91.00	2,184	106.50	2,556
18.40 Coin operated dryer.	2 No.	15.50	31	597.00	1,194	612.50	1,225
18.50 Coin operated washer.	2 No.	15.50	31	762.00	1,524	777.50	1,555
SUBTOTAL - APPLIANCES	16.12 /m2 GFA		1,178		28,758		29,936

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24 apt.	664.00	15,936	1,920.00	46,080	2,584.00	62,016
SUBTOTAL - PLUMBING	33.40 /m2 GFA		15,936		46,080		62,016
20. HEATING							
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24 apt.	460.00	11,040	1,050.00	25,200	1,510.00	36,240
SUBTOTAL - HEATING	19.52 /m2 GFA		11,040		25,200		36,240

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	78.00	1,872	234.00	5,616	312.00	7,488
SUBTOTAL - VENTILATION	4.03 /m2 GFA		1,872		5,616		7,488
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	29.00	696	56.00	1,344	85.00	2,040
SUBTOTAL - FIRE PROTECTION	1.10 /m2 GFA		696		1,344		2,040
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	955.00	22,920	1,040.00	24,960	1,995.00	47,880
SUBTOTAL - ELECTRICAL	25.78 /m2 GFA		22,920		24,960		47,880

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads - setup - supervision - plant - site office - small tools - security - boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit - permits - bonds - insurance - office overhead - profit	24 apt.	800.00	19,200	380.00	9,120	1,180.00	28,320
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	15.25 /m2 GFA		19,200		9,120		28,320
TOTAL - RED DEER	395.28 /m2 GFA		260,177		473,862		734,041

DETAILED COST ESTIMATES FOR FORT McMURRAY

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.62	552	1.07	953	1.69	1,506
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.57	107	0.98	184	1.55	291
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.20	224	19.30	1,351	22.50	1,575
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.91	456	0.28	140	1.19	596
	SUBTOTAL - EXCAVATION	2.14	/m2 GFA		1,339		2,629		3,968
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	154.00	8,932	154.00	8,932
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.68	1,123	0.68	1,123
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	6.19	1,374	3.00	666	9.19	2,040

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	17.78	1,707	9.35	898	27.13	2,604
2.40	90 mm concrete (20 MPa) in slab on grade.	456	m2	3.93	1,792	12.00	5,472	15.93	7,264
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456	m2	0.00	0	3.20	1,459	3.20	1,459
2.55	38 mm thick rigid insulation to concrete wall (basement).	117	m2	2.42	283	4.74	555	7.16	838
2.60	Parging to concrete walls.	29	m2	9.24	268	4.45	129	13.69	397
	SUBTOTAL - CONCRETE	13.28	/m2 GFA		5,424		19,234		24,658
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	159	m2	0.39	62	0.39	62	0.78	124
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96	m	7.13	684	4.40	422	11.53	1,107
	SUBTOTAL - DAMPROOFING	0.66	/m2 GFA		746		484		1,231
4.	SIDING								
4.10	Prefinished aluminum siding	98	m2	7.68	753	15.60	1,529	23.28	2,281

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.86	602	1.24	868	2.10	1,470
4.50	Stucco on wire mesh incl. building paper.	678 m2	14.04	9,519	6.90	4,678	20.94	14,197
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	6.80	401	10.90	643	17.70	1,044
	SUBTOTAL - SIDING	10.23 /m2 GFA		11,275		7,718		18,993
5.	ROOFING/SHEET METAL							
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	28.85	15,204	23.45	12,358	52.30	27,562
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.73	912	8.28	4,364	10.01	5,275
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.34	197	0.34	197	0.68	394
5.50	Prefinished flashing over window.	66 m	2.07	137	3.29	217	5.36	354
	SUBTOTAL - ROOFING/SHEET METAL	18.09 /m2 GFA		16,449		17,136		33,586
6.	CARPENTRY (ROUGH)							
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	850.00	32,300	850.00	32,300

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	628.00	27,632	628.00	27,632
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	9.66	39,316	9.66	39,316
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	31.00	57,567	0.00	0	31.00	57,567
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.45	45	0.75	74	1.20	119
	SUBTOTAL - CARPENTRY (ROUGH)	84.51 /m2 GFA		57,612		99,322		156,934

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7. CARPENTRY (FINISH)								
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	653.00	1,306	465.00	930	1,118.00	2,236
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.34	4,441	1.18	3,911	2.52	8,351
	SUBTOTAL - CARPENTRY (FINISH)	5.70 /m2 GFA		5,747		4,841		10,587
8. WINDOWS AND GLAZING								
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	1,130.00	20,340	1,130.00	20,340
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	900.00	3,600	900.00	3,600
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	254.00	1,524	254.00	1,524

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40	Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28	No.	0.00	0	173.00	4,844	173.00	4,844
8.50	Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3	No.	0.00	0	144.00	432	144.00	432
	SUBTOTAL - WINDOWS AND GLAZING	16.55	/m2 GFA		0		30,740		30,740
9.	SEALANTS								
9.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725	m	0.42	305	0.28	203	0.70	508
9.20	Caulk (interior) - ceramic tile	227	m	1.16	263	0.62	141	1.78	404
	SUBTOTAL - SEALANTS	0.49	/m2 GFA		568		344		912
10.	Doors								
10.03	Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3	No	258.00	774	1,565.00	4,695	1,823.00	5,469

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	192.00	1,536	1,102.00	8,816	1,294.00	10,352
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	27.00	1,350	205.00	10,250	232.00	11,600
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	27.00	27	257.00	257	284.00	284
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	14.25	684	43.25	2,076	57.50	2,760
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	27.00	27	230.00	230	257.00	257

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	13.50	1,053	133.00	10,374	146.50	11,427
SUBTOTAL - DOORS	22.70	/m2 GFA		5,451		36,698		42,149
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	13.50	338	26.18	655	39.68	992
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	9.00	729	10.70	867	19.70	1,596
11.40 Bathroom privacy latch sets.	24	set	9.00	216	12.84	308	21.84	524
11.50 Door closers (rated).	14	No.	15.00	210	29.86	418	44.86	628
SUBTOTAL - HARDWARE	2.01	/m2 GFA		1,493		2,247		3,740
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	28.30	3,877	19.40	2,658	47.70	6,535
SUBTOTAL - CERAMIC TILING	3.52	/m2 GFA		3,877		2,658		6,535

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	3.60	14,062	2.37	9,257	5.97	23,319
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	3.96	2,907	2.74	2,011	6.70	4,918
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	3.96	1,929	3.45	1,680	7.41	3,609
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	5.05	318	3.60	227	8.65	545
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	4.12	7,774	3.82	7,208	7.94	14,983
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	8.18	33	7.67	31	15.85	63
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	5.20	2,725	3.32	1,740	8.52	4,464
13.40 Finish to ceilings - textured	1,425 m2	1.94	2,765	1.36	1,938	3.30	4,703

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.34	458	0.31	417	0.65	875
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.87	633	5.10	3,713	5.97	4,346
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.87	790	5.10	4,631	5.97	5,421
SUBTOTAL - WALLBOARD	36.21 /m2 GFA		34,392		32,853		67,245
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	6.30	2,293	11.67	4,248	17.97	6,541
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.75	4,860	16.10	20,866	19.85	25,726
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	20.00	1,340	26.50	1,776	46.50	3,116
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	8.80	11,774	4.71	6,302	13.51	18,076
SUBTOTAL - FLOORING	28.79 /m2 GFA		20,268		33,191		53,459
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	5.40	140	1.30	34	6.70	174

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783 m	1.43	1,120	0.96	752	2.39	1,871
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196 m2	2.32	12,055	0.70	3,637	3.02	15,692
15.30 Two coats urethane varnish on doors and frames.	105 No.	27.40	2,877	6.26	657	33.66	3,534
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328 m	0.69	1,606	0.15	349	0.84	1,956
15.50 Prepare, prime, one coat semigloss on shelving.	94 m2	2.26	212	0.47	44	2.73	257
SUBTOTAL - PAINTING	12.65 /m2 GFA		18,011		5,473		23,484
16. FITTINGS							
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107 m	3.46	370	5.99	641	9.45	1,011

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	35.70	6,962	224.00	43,680	259.70	50,642
SUBTOTAL - FITTINGS	27.82 /m2 GFA		7,332		44,321		51,653
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	6.20	595	9.10	874	15.30	1,469
17.20 Medicine cabinet	24 No.	12.35	296	43.00	1,032	55.35	1,328
17.30 25 mm dia. chrome shower curtain rod.	24 No.	6.75	162	7.30	175	14.05	337
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	65.00	65	394.00	394	459.00	459
17.50 18 mm dia. chrome coat rods.	24 No.	4.50	108	6.25	150	10.75	258
17.60 Drapery tracks.	102 m	4.20	428	10.50	1,071	14.70	1,499

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98	m	12.75	1,250	46.00	4,508	58.75	5,758
17.80 Metal balustrade to stairs c/w vinyl cap.	66	m	12.75	842	42.50	2,805	55.25	3,647
17.90 50 mm dia. pipe handrail and brackets.	54	m	27.50	1,485	47.85	2,584	75.35	4,069
SUBTOTAL - SPECIALTIES	10.14	/m2 GFA		5,231		13,593		18,824
18. APPLIANCES								
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24	No.	19.00	456	533.00	12,792	552.00	13,248
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No.	19.00	456	503.00	12,072	522.00	12,528
18.30 Range hood	24	No.	20.00	480	111.00	2,664	131.00	3,144
18.40 Coin operated dryer.	2	No.	19.00	38	573.00	1,146	592.00	1,184
18.50 Coin operated washer.	2	No.	19.00	38	743.00	1,486	762.00	1,524
SUBTOTAL - APPLIANCES	17.03	/m2 GFA		1,468		30,160		31,628

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24	apt.	850.00	20,400	2,025.00	48,600	2,875.00	69,000
SUBTOTAL - PLUMBING	37.16	/m2 GFA		20,400		48,600		69,000
20. HEATING								
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt.	525.00	12,600	1,270.00	30,480	1,795.00	43,080
SUBTOTAL - HEATING	23.20	/m2 GFA		12,600		30,480		43,080

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION								
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24	apt.	98.00	2,352	295.00	7,080	393.00	9,432
SUBTOTAL - VENTILATION	5.08	/m2 GFA		2,352		7,080		9,432
22. FIRE PROTECTION								
22.10 Fire protection system, complete for 24-unit apartment building.	24	apt.	37.00	888	72.00	1,728	109.00	2,616
SUBTOTAL - FIRE PROTECTION	1.41	/m2 GFA		888		1,728		2,616
23. ELECTRICAL								
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24	apt.	917.00	22,008	1,210.00	29,040	2,127.00	51,048
SUBTOTAL - ELECTRICAL	27.49	/m2 GFA		22,008		29,040		51,048

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads							
- setup							
- supervision							
- plant							
- site office							
- small tools							
- security							
- boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit							
- permits							
- bonds							
- insurance							
- office overhead							
- profit	24 apt.	750.00	18,000	350.00	8,400	1,100.00	26,400
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	14.22 /m2 GFA		18,000		8,400		26,400
TOTAL - FORT McMURRAY	447.44 /m2 GFA		305,499		525,402		830,902

DETAILED COST ESTIMATES FOR GRANDE PRAIRIE

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.60	535	1.03	918	1.63	1,452
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.56	105	0.94	177	1.50	282
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.14	220	11.92	834	15.06	1,054
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.88	441	0.26	130	1.14	571
	SUBTOTAL - EXCAVATION	1.81	/m2 GFA		1,301		2,059		3,360
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	135.75	7,874	135.75	7,874
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.69	1,140	0.69	1,140
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.62	1,248	2.86	635	8.48	1,883

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.05	1,541	9.07	871	25.12	2,412
2.40	90 mm concrete (20 MPa) in slab on grade.	456	m2	3.87	1,765	11.30	5,153	15.17	6,918
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456	m2	0.00	0	3.16	1,441	3.16	1,441
2.55	38 mm thick rigid insulation to concrete wall (basement).	117	m2	2.11	247	4.71	551	6.82	798
2.60	Parging to concrete walls.	29	m2	8.95	260	4.30	125	13.25	384
	SUBTOTAL - CONCRETE	12.30	/m2 GFA		5,060		17,789		22,848
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	159	m2	0.37	59	0.37	59	0.74	118
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96	m	6.20	595	4.28	411	10.48	1,006
	SUBTOTAL - DAMPROOFING	0.61	/m2 GFA		654		470		1,124
4.	SIDING								
4.10	Prefinished aluminum siding	98	m2	6.76	662	14.03	1,375	20.79	2,037

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.71	497	1.10	770	1.81	1,267
4.50	Stucco on wire mesh incl. building paper.	678 m2	13.80	9,356	6.60	4,475	20.40	13,831
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	6.18	365	10.90	643	17.08	1,008
	SUBTOTAL - SIDING	9.77 /m2 GFA		10,881		7,263		18,143
5. ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	22.38	11,794	19.27	10,155	41.65	21,950
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.65	870	7.55	3,979	9.20	4,848
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.32	186	0.29	168	0.61	354
5.50	Prefinished flashing over window.	66 m	1.89	125	3.32	219	5.21	344
	SUBTOTAL - ROOFING/SHEET METAL	14.81 /m2 GFA		12,974		14,521		27,496
6. CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	771.00	29,298	771.00	29,298

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	576.00	25,344	576.00	25,344
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	8.87	36,101	8.87	36,101
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	30.26	56,193	0.00	0	30.26	56,193
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.44	44	0.71	70	1.15	114
	SUBTOTAL - CARPENTRY (ROUGH)	79.19 /m2 GFA		56,236		90,813		147,050

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7. CARPENTRY (FINISH)								
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	465.00	930	450.00	900	915.00	1,830
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.28	4,242	1.17	3,877	2.45	8,119
	SUBTOTAL - CARPENTRY (FINISH)	5.36 /m2 GFA		5,172		4,777		9,949
8. WINDOWS AND GLAZING								
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	915.00	16,470	915.00	16,470
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	890.00	3,560	890.00	3,560
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	256.00	1,536	256.00	1,536

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28	No.	0.00	0	172.00	4,816	172.00	4,816
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3	No.	0.00	0	140.00	420	140.00	420
SUBTOTAL - WINDOWS AND GLAZING	14.43	/m2 GFA		0		26,802		26,802
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725	m	0.40	290	0.28	203	0.68	493
9.20 Caulk (interior) - ceramic tile	227	m	1.10	250	0.59	134	1.69	384
SUBTOTAL - SEALANTS	0.47	/m2 GFA		540		337		877
10. Doors								
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3	No	253.00	759	1,726.00	5,178	1,979.00	5,937

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	197.00	1,576	1,216.00	9,728	1,413.00	11,304
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	26.25	1,313	201.00	10,050	227.25	11,363
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	26.25	26	247.00	247	273.25	273
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	13.30	638	42.35	2,033	55.65	2,671
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	26.25	26	230.00	230	256.25	256

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	13.35	1,041	132.00	10,296	145.35	11,337
SUBTOTAL - DOORS	23.23	/m2 GFA		5,380		37,762		43,142
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	12.75	319	25.08	627	37.83	946
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	8.24	667	10.44	846	18.68	1,513
11.40 Bathroom privacy latch sets.	24	set	8.24	198	12.60	302	20.84	500
11.50 Door closers (rated).	14	No.	14.86	208	29.50	413	44.36	621
SUBTOTAL - HARDWARE	1.93	/m2 GFA		1,392		2,188		3,580
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	26.75	3,665	19.05	2,610	45.80	6,275
SUBTOTAL - CERAMIC TILING	3.38	/m2 GFA		3,665		2,610		6,275

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	2.72	10,624	2.21	8,632	4.93	19,257
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	2.97	2,180	2.79	2,048	5.76	4,228
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	2.97	1,446	3.43	1,670	6.40	3,117
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	5.14	324	3.65	230	8.79	554
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	4.05	7,642	3.90	7,359	7.95	15,002
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	6.13	25	7.81	31	13.94	56
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	4.36	2,285	3.11	1,630	7.47	3,914
13.40 Finish to ceilings - textured	1,425 m2	1.26	1,796	1.20	1,710	2.46	3,506

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.32	431	0.29	390	0.61	821
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.84	612	4.68	3,407	5.52	4,019
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.84	763	4.68	4,249	5.52	5,012
SUBTOTAL - WALLBOARD	32.03 /m2 GFA		28,126		31,357		59,484
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	6.10	2,220	11.68	4,252	17.78	6,472
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.51	4,549	15.76	20,425	19.27	24,974
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	16.55	1,109	21.75	1,457	38.30	2,566
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.35	9,834	3.70	4,951	11.05	14,785
SUBTOTAL - FLOORING	26.28 /m2 GFA		17,713		31,084		48,797
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	5.09	132	1.23	32	6.32	164

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783 m	1.32	1,034	0.95	744	2.27	1,777
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196 m2	2.12	11,016	0.68	3,533	2.80	14,549
15.30 Two coats urethane varnish on doors and frames.	105 No.	26.25	2,756	6.04	634	32.29	3,390
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328 m	0.63	1,467	0.15	349	0.78	1,816
15.50 Prepare, prime, one coat semigloss on shelving.	94 m2	2.08	196	0.36	34	2.44	229
SUBTOTAL - PAINTING	11.81 /m2 GFA		16,600		5,326		21,926
16. FITTINGS							
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107 m	3.52	377	5.69	609	9.21	985

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	32.40	6,318	210.00	40,950	242.40	47,268
SUBTOTAL - FITTINGS	25.98 /m2 GFA		6,695		41,559		48,253
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	5.94	570	9.10	874	15.04	1,444
17.20 Medicine cabinet	24 No.	11.70	281	43.00	1,032	54.70	1,313
17.30 25 mm dia. chrome shower curtain rod.	24 No.	6.35	152	7.42	178	13.77	330
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	60.00	60	388.00	388	448.00	448
17.50 18 mm dia. chrome coat rods.	24 No.	4.28	103	6.36	153	10.64	255
17.60 Drapery tracks.	102 m	3.90	398	9.41	960	13.31	1,358

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98	m	11.50	1,127	46.00	4,508	57.50	5,635
17.80 Metal balustrade to stairs c/w vinyl cap.	66	m	11.50	759	41.00	2,706	52.50	3,465
17.90 50 mm dia. pipe handrail and brackets.	54	m	26.00	1,404	47.00	2,538	73.00	3,942
SUBTOTAL - SPECIALTIES	9.80	/m2 GFA		4,854		13,336		18,190
18. APPLIANCES								
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24	No.	18.00	432	535.00	12,840	553.00	13,272
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No.	18.00	432	510.00	12,240	528.00	12,672
18.30 Range hood	24	No.	18.00	432	111.30	2,671	129.30	3,103
18.40 Coin operated dryer.	2	No.	18.00	36	620.00	1,240	638.00	1,276
18.50 Coin operated washer.	2	No.	18.00	36	802.00	1,604	820.00	1,640
SUBTOTAL - APPLIANCES	17.21	/m2 GFA		1,368		30,595		31,963

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24 apt.	886.00	21,264	2,110.00	50,640	2,996.00	71,904
SUBTOTAL - PLUMBING	38.72 /m2 GFA		21,264		50,640		71,904
20. HEATING							
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24 apt.	517.00	12,408	1,200.00	28,800	1,717.00	41,208
SUBTOTAL - HEATING	22.19 /m2 GFA		12,408		28,800		41,208

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	94.00	2,256	286.00	6,864	380.00	9,120
SUBTOTAL - VENTILATION	4.91 /m2 GFA		2,256		6,864		9,120
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	36.00	864	72.00	1,728	108.00	2,592
SUBTOTAL - FIRE PROTECTION	1.40 /m2 GFA		864		1,728		2,592
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	940.00	22,560	1,290.00	30,960	2,230.00	53,520
SUBTOTAL - ELECTRICAL	28.82 /m2 GFA		22,560		30,960		53,520

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads							
- setup							
- supervision							
- plant							
- site office							
- small tools							
- security							
- boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit							
- permits							
- bonds							
- insurance							
- office overhead							
- profit	24 apt.	678.00	16,272	345.00	8,280	1,023.00	24,552
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.22 /m2 GFA		16,272		8,280		24,552
TOTAL - GRANDE PRAIRIE	426.04 /m2 GFA		286,803		504,352		791,155

DETAILED COST ESTIMATES FOR HINTON

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION								
1.10 Excavate for basement, wall footings, and bases.	891	m3	0.47	419	0.99	882	1.46	1,301
1.20 Backfill to basement walls, footings, and bases.	188	m3	0.42	79	0.89	167	1.31	246
1.30 150 mm gravel or sand bed under slab on grade.	70	m3	3.40	238	6.84	479	10.24	717
1.40 .152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.84	421	0.24	120	1.08	541
SUBTOTAL - EXCAVATION	1.51	/m2 GFA		1,157		1,648		2,805
2. CONCRETE								
2.10 25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	124.60	7,227	124.60	7,227
2.20 Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.64	1,057	0.64	1,057
2.30 Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	7.64	1,696	4.18	928	11.82	2,624

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96 m	22.02	2,114	13.19	1,266	35.21	3,380
2.40	90 mm concrete (20 MPa) in slab on grade.	456 m2	3.99	1,819	10.41	4,747	14.40	6,566
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456 m2	0.00	0	3.08	1,404	3.08	1,404
2.55	38 mm thick rigid insulation to concrete wall (basement).	117 m2	1.98	232	4.43	518	6.41	750
2.60	Parging to concrete walls.	29 m2	9.16	266	3.76	109	12.92	375
	SUBTOTAL - CONCRETE	12.59 /m2 GFA		6,127		17,257		23,384
3.	DAMPROOFING							
3.10	Two coats asphaltic emulsion on concrete walls.	159 m2	0.29	46	0.29	46	0.58	92
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96 m	4.53	435	4.07	391	8.60	826
	SUBTOTAL - DAMPROOFING	0.49 /m2 GFA		481		437		918
4.	SIDING							
4.10	Prefinished aluminum siding	98 m2	7.94	778	11.19	1,097	19.13	1,875

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700	FBM	0.74	518	1.20	840	1.94	1,358
4.50	Stucco on wire mesh incl. building paper.	678	m2	13.19	8,943	6.90	4,678	20.09	13,621
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59	m2	4.33	255	11.34	669	15.67	925
	SUBTOTAL - SIDING	9.57	/m2 GFA		10,494		7,284		17,778
5.	ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527	m2	19.80	10,435	21.11	11,125	40.91	21,560
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527	m2	1.55	817	7.53	3,968	9.08	4,785
5.40	.102 mm polyethylene vapour barrier.	580	m2	0.27	157	0.21	122	0.48	278
5.50	Prefinished flashing over window.	66	m	1.33	88	3.46	228	4.79	316
	SUBTOTAL - ROOFING/SHEET METAL	14.51	/m2 GFA		11,496		15,443		26,939
6.	CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0	MFBM	0.00	0	730.00	27,740	730.00	27,740

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	550.00	24,200	550.00	24,200
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	7.86	31,990	7.86	31,990
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	29.66	55,079	0.00	0	29.66	55,079
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.41	41	0.71	70	1.12	111
	SUBTOTAL - CARPENTRY (ROUGH)	74.92 /m2 GFA		55,119		84,000		139,120

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7. CARPENTRY (FINISH)								
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	570.00	1,140	420.00	840	990.00	1,980
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.10	3,645	1.11	3,679	2.21	7,324
	SUBTOTAL - CARPENTRY (FINISH)	5.01 /m2 GFA		4,785		4,519		9,304
8. WINDOWS AND GLAZING								
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	915.00	16,470	915.00	16,470
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	864.00	3,456	864.00	3,456
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	246.00	1,476	246.00	1,476

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40	Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28 No.	0.00	0	167.00	4,676	167.00	4,676
8.50	Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3 No.	0.00	0	136.00	408	136.00	408
	SUBTOTAL - WINDOWS AND GLAZING	14.26 /m2 GFA		0		26,486		26,486
9.	SEALANTS							
9.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725 m	0.40	290	0.26	189	0.66	479
9.20	Caulk (interior) - ceramic tile	227 m	1.10	250	0.58	132	1.68	381
	SUBTOTAL - SEALANTS	0.46 /m2 GFA		540		320		860
10.	Doors							
10.03	Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3 No	250.00	750	1,710.00	5,130	1,960.00	5,880

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	194.00	1,552	1,204.00	9,632	1,398.00	11,184
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	23.50	1,175	205.00	10,250	228.50	11,425
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	23.50	24	247.00	247	270.50	271
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	12.50	600	43.00	2,064	55.50	2,664
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	23.50	24	227.00	227	250.50	251

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	13.00	1,014	131.00	10,218	144.00	11,232
SUBTOTAL - DOORS	23.11	/m2 GFA		5,138		37,768		42,906
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	11.75	294	24.65	616	36.40	910
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	8.00	648	10.70	867	18.70	1,515
11.40 Bathroom privacy latch sets.	24	set	8.00	192	12.84	308	20.84	500
11.50 Door closers (rated).	14	No.	14.00	196	28.60	400	42.60	596
SUBTOTAL - HARDWARE	1.90	/m2 GFA		1,330		2,192		3,521
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	25.00	3,425	18.09	2,478	43.09	5,903
SUBTOTAL - CERAMIC TILING	3.18	/m2 GFA		3,425		2,478		5,903

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	3.08	12,030	2.32	9,062	5.40	21,092
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	3.41	2,503	2.93	2,151	6.34	4,654
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	3.41	1,661	3.60	1,753	7.01	3,414
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	5.55	350	3.81	240	9.36	590
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	4.46	8,416	4.02	7,586	8.48	16,002
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	7.02	28	8.15	33	15.17	61
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	4.57	2,395	2.84	1,488	7.41	3,883
13.40 Finish to ceilings - textured	1,425 m2	1.24	1,767	1.22	1,739	2.46	3,506

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.27	363	0.21	283	0.48	646
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.82	597	4.63	3,371	5.45	3,968
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.82	745	4.63	4,204	5.45	4,949
SUBTOTAL - WALLBOARD	33.80 /m2 GFA		30,854		31,908		62,763
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.64	2,053	11.14	4,055	16.78	6,108
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.40	4,406	14.76	19,129	18.16	23,535
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	17.44	1,168	23.18	1,553	40.62	2,722
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.84	10,490	3.89	5,205	11.73	15,695
SUBTOTAL - FLOORING	25.88 /m2 GFA		18,118		29,942		48,060
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	4.70	122	1.19	31	5.89	153

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783	m	1.52	1,190	0.93	728	2.45	1,918
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196	m2	2.20	11,431	0.68	3,533	2.88	14,964
15.30 Two coats urethane varnish on doors and frames.	105	No.	25.50	2,678	5.88	617	31.38	3,295
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328	m	0.71	1,653	0.15	349	0.86	2,002
15.50 Prepare, prime, one coat semigloss on shelving.	94	m2	2.32	218	0.45	42	2.77	260
SUBTOTAL - PAINTING	12.17	/m2 GFA		17,292		5,301		22,593
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.47	371	5.67	607	9.14	978

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	29.65	5,782	195.00	38,025	224.65	43,807
SUBTOTAL - FITTINGS	24.12 /m2 GFA		6,153		38,632		44,785
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	5.50	528	8.40	806	13.90	1,334
17.20 Medicine cabinet	24 No.	11.00	264	37.80	907	48.80	1,171
17.30 25 mm dia. chrome shower curtain rod.	24 No.	6.50	156	7.35	176	13.85	332
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	58.50	59	383.00	383	441.50	442
17.50 18 mm dia. chrome coat rods.	24 No.	3.00	72	5.25	126	8.25	198
17.60 Drapery tracks.	102 m	3.55	362	8.73	890	12.28	1,253

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98	m	11.35	1,112	45.00	4,410	56.35	5,522
17.80 Metal balustrade to stairs c/w vinyl cap.	66	m	11.35	749	40.00	2,640	51.35	3,389
17.90 50 mm dia. pipe handrail and brackets.	54	m	24.50	1,323	46.25	2,498	70.75	3,821
SUBTOTAL - SPECIALTIES	9.40	/m2 GFA		4,625		12,837		17,462
18. APPLIANCES								
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24	No.	17.00	408	523.00	12,552	540.00	12,960
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No.	17.00	408	495.00	11,880	512.00	12,288
18.30 Range hood	24	No.	17.00	408	99.00	2,376	116.00	2,784
18.40 Coin operated dryer.	2	No.	17.00	34	610.00	1,220	627.00	1,254
18.50 Coin operated washer.	2	No.	17.00	34	790.00	1,580	807.00	1,614
SUBTOTAL - APPLIANCES	16.64	/m2 GFA		1,292		29,608		30,900

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24	apt.	753.00	18,072	1,980.00	47,520	2,733.00	65,592
SUBTOTAL - PLUMBING	35.32	/m2 GFA		18,072		47,520		65,592
20. HEATING								
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt.	448.00	10,752	1,180.00	28,320	1,628.00	39,072
SUBTOTAL - HEATING	21.04	/m2 GFA		10,752		28,320		39,072

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	95.50	2,292	288.00	6,912	383.50	9,204
SUBTOTAL - VENTILATION	4.96 /m2 GFA		2,292		6,912		9,204
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	36.00	864	72.00	1,728	108.00	2,592
SUBTOTAL - FIRE PROTECTION	1.40 /m2 GFA		864		1,728		2,592
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	995.00	23,880	1,500.00	36,000	2,495.00	59,880
SUBTOTAL - ELECTRICAL	32.25 /m2 GFA		23,880		36,000		59,880

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads - setup - supervision - plant - site office - small tools - security - boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit - permits - bonds - insurance - office overhead - profit	24 apt.	682.00	16,368	347.00	8,328	1,029.00	24,696
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.30 /m2 GFA		16,368		8,328		24,696
TOTAL - HINTON	418.16 /m2 GFA		283,222		493,300		776,523

DETAILED COST ESTIMATES FOR LETHBRIDGE

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.42	374	1.43	1,274	1.85	1,648
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.38	71	1.35	254	1.73	325
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.07	215	12.34	864	15.41	1,079
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.84	421	0.24	120	1.08	541
	SUBTOTAL - EXCAVATION	1.93 /m2 GFA			1,081		2,512		3,593
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	91.20	5,290	91.20	5,290
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.66	1,090	0.66	1,090
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.78	1,283	2.40	533	8.18	1,816

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	16.63	1,596	7.57	727	24.20	2,323
2.40	90 mm concrete (20 MPa) in slab on grade.	456	m2	3.84	1,751	7.26	3,311	11.10	5,062
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456	m2	0.00	0	3.05	1,391	3.05	1,391
2.55	38 mm thick rigid insulation to concrete wall (basement).	117	m2	2.12	248	4.47	523	6.59	771
2.60	Parging to concrete walls.	29	m2	8.80	255	2.73	79	11.53	334
	SUBTOTAL - CONCRETE	9.73	/m2 GFA		5,134		12,943		18,077
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	159	m2	0.32	51	0.29	46	0.61	97
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96	m	4.60	442	4.04	388	8.64	829
	SUBTOTAL - DAMPROOFING	0.50	/m2 GFA		492		434		926
4.	SIDING								
4.10	Prefinished aluminum siding	98	m2	5.25	515	14.20	1,392	19.45	1,906

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.76	532	1.27	889	2.03	1,421
4.50	Stucco on wire mesh incl. building paper.	678 m2	12.16	8,244	6.36	4,312	18.52	12,557
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	4.82	294	10.24	604	15.06	889
	SUBTOTAL - SIDING	9.03 /m2 GFA		9,575		7,197		16,772
5. ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	19.75	10,408	16.96	8,938	36.71	19,346
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.67	880	8.26	4,353	9.93	5,233
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.25	145	0.29	168	0.54	313
5.50	Prefinished flashing over window.	66 m	1.44	95	3.04	201	4.48	296
	SUBTOTAL - ROOFING/SHEET METAL	13.56 /m2 GFA		11,528		13,660		25,188
6. CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	765.00	29,070	765.00	29,070

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0	MFBM	0.00	0	572.00	25,168	572.00	25,168
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070	m2	0.00	0	7.96	32,397	7.96	32,397
6.40	Labour Only - complete framing including installation of windows.	1,857	m2	29.25	54,317	0.00	0	29.25	54,317
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99	m	0.42	42	0.76	75	1.18	117
	SUBTOTAL - CARPENTRY (ROUGH)	75.97	/m2 GFA		54,359		86,710		141,069

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7. CARPENTRY (FINISH)								
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	560.00	1,120	417.00	834	977.00	1,954
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.12	3,712	1.12	3,712	2.24	7,423
	SUBTOTAL - CARPENTRY (FINISH)	5.05 /m2 GFA		4,832		4,546		9,377
8. WINDOWS AND GLAZING								
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	904.00	16,272	904.00	16,272
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	853.00	3,412	853.00	3,412
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	243.00	1,458	243.00	1,458

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28 No.	0.00	0	164.00	4,592	164.00	4,592
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3 No.	0.00	0	134.00	402	134.00	402
SUBTOTAL - WINDOWS AND GLAZING	14.07 /m2 GFA		0		26,136		26,136
9. SEALANTS							
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725 m	0.38	276	0.24	174	0.62	450
9.20 Caulk (interior) - ceramic tile	227 m	1.05	238	0.57	129	1.62	368
SUBTOTAL - SEALANTS	0.44 /m2 GFA		514		303		817
10. Doors							
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3 No	251.00	753	1,738.00	5,214	1,989.00	5,967

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	193.00	1,544	1,225.00	9,800	1,418.00	11,344
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	22.00	1,100	182.00	9,100	204.00	10,200
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	22.00	22	230.00	230	252.00	252
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	12.00	576	42.00	2,016	54.00	2,592
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	22.00	22	209.00	209	231.00	231

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78	No.	12.00	936	119.50	9,321	131.50	10,257
SUBTOTAL - DOORS	21.99	/m2 GFA		4,953		35,890		40,843
11. HARDWARE								
11.15 Lock sets to interior doors.	25	set	10.80	270	23.10	578	33.90	848
11.25 Butts to interior doors. (included with frames)	129	pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81	set	8.00	648	10.50	851	18.50	1,499
11.40 Bathroom privacy latch sets.	24	set	8.00	192	12.60	302	20.60	494
11.50 Door closers (rated).	14	No.	13.25	186	27.80	389	41.05	575
SUBTOTAL - HARDWARE	1.84	/m2 GFA		1,296		2,120		3,415
12. CERAMIC TILING								
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137	m2	20.60	2,822	23.45	3,213	44.05	6,035
SUBTOTAL - CERAMIC TILING	3.25	/m2 GFA		2,822		3,213		6,035

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	2.38	9,296	2.04	7,968	4.42	17,265
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	2.65	1,945	2.56	1,879	5.21	3,824
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	2.65	1,291	3.14	1,529	5.79	2,820
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	4.78	301	3.39	214	8.17	515
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	3.71	7,001	3.58	6,755	7.29	13,756
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	5.46	22	7.28	29	12.74	51
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	3.91	2,049	2.87	1,504	6.78	3,553
13.40 Finish to ceilings - textured	1,425 m2	1.21	1,724	1.10	1,568	2.31	3,292

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.25	337	0.29	390	0.54	727
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.82	597	4.96	3,611	5.78	4,208
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.82	745	4.96	4,504	5.78	5,248
SUBTOTAL - WALLBOARD	29.76 /m2 GFA		25,307		29,951		55,258
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.78	2,104	11.35	4,131	17.13	6,235
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.20	4,147	14.19	18,390	17.39	22,537
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	17.85	1,196	22.38	1,499	40.23	2,695
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	7.98	10,677	3.88	5,191	11.86	15,869
SUBTOTAL - FLOORING	25.49 /m2 GFA		18,124		29,213		47,337
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	4.26	111	1.17	30	5.43	141

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783	m	1.43	1,120	0.85	666	2.28	1,785
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196	m2	2.25	11,691	0.68	3,533	2.93	15,224
15.30 Two coats urethane varnish on doors and frames.	105	No.	25.00	2,625	5.80	609	30.80	3,234
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328	m	0.67	1,560	0.13	303	0.80	1,862
15.50 Prepare, prime, one coat semigloss on shelving.	94	m2	2.20	207	0.42	39	2.62	246
SUBTOTAL - PAINTING	12.11	/m2 GFA		17,313		5,180		22,493
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107	m	3.65	391	5.62	601	9.27	992

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195	m	31.00	6,045	214.00	41,730	245.00	47,775
SUBTOTAL - FITTINGS	26.26	/m2 GFA		6,436		42,331		48,767
17. SPECIALTIES								
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96	No.	5.50	528	7.90	758	13.40	1,286
17.20 Medicine cabinet	24	No.	11.00	264	36.75	882	47.75	1,146
17.30 25 mm dia. chrome shower curtain rod.	24	No.	5.50	132	6.50	156	12.00	288
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1	set	59.50	60	381.00	381	440.50	441
17.50 18 mm dia. chrome coat rods.	24	No.	3.25	78	5.50	132	8.75	210
17.60 Drapery tracks.	102	m	3.48	355	8.58	875	12.06	1,230

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal balustrade to balconies c/w balusters 100 mm o.c.	98	m	12.00	1,176	43.64	4,277	55.64	5,453
17.80 Metal balustrade to stairs c/w vinyl cap.	66	m	12.00	792	32.28	2,130	44.28	2,922
17.90 50 mm dia. pipe handrail and brackets.	54	m	24.50	1,323	44.30	2,392	68.80	3,715
SUBTOTAL - SPECIALTIES	8.99	/m2 GFA		4,707		11,984		16,691
18. APPLIANCES								
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24	No.	17.00	408	517.00	12,408	534.00	12,816
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24	No.	17.00	408	490.00	11,760	507.00	12,168
18.30 Range hood	24	No.	17.00	408	105.00	2,520	122.00	2,928
18.40 Coin operated dryer.	2	No.	17.00	34	608.00	1,216	625.00	1,250
18.50 Coin operated washer.	2	No.	17.00	34	787.00	1,574	804.00	1,608
SUBTOTAL - APPLIANCES	16.57	/m2 GFA		1,292		29,478		30,770

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24 apt.	622.00	14,928	1,910.00	45,840	2,532.00	60,768
SUBTOTAL - PLUMBING	32.72 /m2 GFA		14,928		45,840		60,768
20. HEATING							
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24 apt.	327.00	7,848	808.00	19,392	1,135.00	27,240
SUBTOTAL - HEATING	14.67 /m2 GFA		7,848		19,392		27,240

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	87.00	2,088	260.00	6,240	347.00	8,328
SUBTOTAL - VENTILATION	4.48 /m2 GFA		2,088		6,240		8,328
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	29.00	696	56.00	1,344	85.00	2,040
SUBTOTAL - FIRE PROTECTION	1.10 /m2 GFA		696		1,344		2,040
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	757.00	18,168	1,016.00	24,384	1,773.00	42,552
SUBTOTAL - ELECTRICAL	22.91 /m2 GFA		18,168		24,384		42,552

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads							
- setup							
- supervision							
- plant							
- site office							
- small tools							
- security							
- boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit							
- permits							
- bonds							
- insurance							
- office overhead							
- profit	24 apt.	695.00	16,680	355.00	8,520	1,050.00	25,200
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.57 /m2 GFA		16,680		8,520		25,200
TOTAL - LETHBRIDGE	392.40 /m2 GFA		262,741		465,953		728,692

DETAILED COST ESTIMATES FOR MEDICINE HAT

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.57	508	0.97	864	1.54	1,372
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.52	98	0.90	169	1.42	267
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.15	221	9.42	659	12.57	880
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.85	426	0.24	120	1.09	546
	SUBTOTAL - EXCAVATION	1.65	/m2 GFA		1,252		1,813		3,065
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	105.55	6,122	105.55	6,122
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.67	1,107	0.67	1,107
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	5.94	1,319	2.58	573	8.52	1,891

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96 m	17.10	1,642	8.79	844	25.89	2,485
2.40	90 mm concrete (20 MPa) in slab on grade.	456 m2	3.92	1,788	8.74	3,985	12.66	5,773
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456 m2	0.00	0	3.17	1,446	3.17	1,446
2.55	38 mm thick rigid insulation to concrete wall (basement).	117 m2	2.05	240	4.49	525	6.54	765
2.60	Parging to concrete walls.	29 m2	9.15	265	2.96	86	12.11	351
	SUBTOTAL - CONCRETE	10.74 /m2 GFA		5,253		14,687		19,940
3. DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	159 m2	0.34	54	0.30	48	0.64	102
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96 m	3.80	365	4.26	409	8.06	774
	SUBTOTAL - DAMPROOFING	0.47 /m2 GFA		419		457		876
4. SIDING								
4.10	Prefinished aluminum siding	98 m2	4.90	480	11.25	1,103	16.15	1,583

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.71	497	1.19	833	1.90	1,330
4.50	Stucco on wire mesh incl. building paper.	678 m2	12.25	8,306	6.35	4,305	18.60	12,611
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	4.53	267	14.12	833	18.65	1,100
	SUBTOTAL - SIDING	8.95 /m2 GFA		9,550		7,074		16,624
5. ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	20.00	10,540	17.63	9,291	37.63	19,831
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.63	859	8.30	4,374	9.93	5,233
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.26	151	0.24	139	0.50	290
5.50	Prefinished flashing over window.	66 m	1.37	90	4.35	287	5.72	378
	SUBTOTAL - ROOFING/SHEET METAL	13.86 /m2 GFA		11,640		14,091		25,732
6. CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	748.00	28,424	748.00	28,424

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	559.00	24,596	559.00	24,596
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	8.55	34,799	8.55	34,799
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	21.42	39,777	0.00	0	21.42	39,777
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.42	42	0.76	75	1.18	117
	SUBTOTAL - CARPENTRY (ROUGH)	68.77 /m2 GFA		39,819		87,894		127,712

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.	CARPENTRY (FINISH)							
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	665.00	1,330	400.00	800	1,065.00	2,130
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.10	3,645	1.15	3,811	2.25	7,457
	SUBTOTAL - CARPENTRY (FINISH)	5.16 /m2 GFA		4,975		4,611		9,587
8.	WINDOWS AND GLAZING							
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	921.00	16,578	921.00	16,578
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	869.00	3,476	869.00	3,476
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	248.00	1,488	248.00	1,488

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28 No.	0.00	0	167.00	4,676	167.00	4,676
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3 No.	0.00	0	136.00	408	136.00	408
SUBTOTAL - WINDOWS AND GLAZING	14.34 /m2 GFA		0		26,626		26,626
9. SEALANTS							
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725 m	0.40	290	0.25	181	0.65	471
9.20 Caulk (interior) - ceramic tile	227 m	1.10	250	0.58	132	1.68	381
SUBTOTAL - SEALANTS	0.46 /m2 GFA		540		313		853
10. Doors							
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3 No	247.00	741	1,654.00	4,962	1,901.00	5,703

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8 No.	198.00	1,584	1,160.00	9,280	1,358.00	10,864
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50 No.	22.50	1,125	170.00	8,500	192.50	9,625
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1 No.	22.50	23	219.00	219	241.50	242
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48 No.	12.25	588	39.83	1,912	52.08	2,500
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1 No.	22.50	23	205.00	205	227.50	228

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78 No.	12.25	956	121.00	9,438	133.25	10,394
SUBTOTAL - DOORS	21.30 /m2 GFA		5,039		34,516		39,554
11. HARDWARE							
11.15 Lock sets to interior doors.	25 set	11.50	288	23.78	595	35.28	882
11.25 Butts to interior doors. (included with frames)	129 pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81 set	8.00	648	11.00	891	19.00	1,539
11.40 Bathroom privacy latch sets.	24 set	8.00	192	13.15	316	21.15	508
11.50 Door closers (rated).	14 No.	13.00	182	29.00	406	42.00	588
SUBTOTAL - HARDWARE	1.89 /m2 GFA		1,310		2,207		3,517
12. CERAMIC TILING							
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137 m2	22.00	3,014	23.79	3,259	45.79	6,273
SUBTOTAL - CERAMIC TILING	3.38 /m2 GFA		3,014		3,259		6,273

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906	m2	2.45	9,570	2.16	8,437	4.61	18,007
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734	m2	2.67	1,960	2.71	1,989	5.38	3,949
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487	m2	2.67	1,300	3.34	1,627	6.01	2,927
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63	m2	4.84	305	3.56	224	8.40	529
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887	m2	3.76	7,095	3.79	7,152	7.55	14,247
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4	m2	5.51	22	7.65	31	13.16	53
13.30 Tentest board, Crane 3-183 Redcliffe	524	m2	4.16	2,180	2.94	1,541	7.10	3,720
13.40 Finish to ceilings - textured	1,425	m2	1.29	1,838	1.18	1,682	2.47	3,520

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346 m2	0.26	350	0.24	323	0.50	673
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728 m2	0.85	619	5.08	3,698	5.93	4,317
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908 m2	0.85	772	5.08	4,613	5.93	5,384
SUBTOTAL - WALLBOARD	30.87 /m2 GFA		26,011		31,315		57,326
14. FLOORING							
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364 m2	5.89	2,144	11.60	4,222	17.49	6,366
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296 m2	3.25	4,212	14.60	18,922	17.85	23,134
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67 m2	18.64	1,249	22.79	1,527	41.43	2,776
14.40 Gypcrete floor topping including steel trowel finish.	1,338 m2	8.06	10,784	3.88	5,191	11.94	15,976
SUBTOTAL - FLOORING	25.98 /m2 GFA		18,389		29,862		48,251
15. PAINTING							
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26 m2	4.51	117	1.24	32	5.75	150

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783 m	1.83	1,433	0.85	666	2.68	2,098
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196 m2	2.30	11,951	0.69	3,585	2.99	15,536
15.30 Two coats urethane varnish on doors and frames.	105 No.	24.86	2,610	5.98	628	30.84	3,238
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328 m	0.84	1,956	0.13	303	0.97	2,258
15.50 Prepare, prime, one coat semigloss on shelving.	94 m2	2.53	238	0.42	39	2.95	277
SUBTOTAL - PAINTING	12.69 /m2 GFA		18,305		5,253		23,558
16. FITTINGS							
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107 m	3.78	404	5.79	620	9.57	1,024

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc. - lower vanity and cupboard 27 m - wall units 99 m - worktop unit 69 m	195 m	31.00	6,045	217.00	42,315	248.00	48,360
SUBTOTAL - FITTINGS	26.59 /m2 GFA		6,449		42,935		49,384
17. SPECIALTIES							
17.10 Washroom accessories - 24 No. toilet paperholders - 24 No. soap dishes - 48 No. towel bars	96 No.	5.50	528	7.88	756	13.38	1,284
17.20 Medicine cabinet	24 No.	11.00	264	37.45	899	48.45	1,163
17.30 25 mm dia. chrome shower curtain rod.	24 No.	6.00	144	6.30	151	12.30	295
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.	1 set	59.50	60	381.00	381	440.50	441
17.50 18 mm dia. chrome coat rods.	24 No.	3.50	84	5.30	127	8.80	211
17.60 Drapery tracks.	102 m	3.48	355	8.58	875	12.06	1,230

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max. to balconies.	98 m	12.00	1,176	43.64	4,277	55.64	5,453
17.80 Metal balustrade to stairs c/w vinyl cap.	66 m	12.00	792	38.28	2,526	50.28	3,318
17.90 50 mm dia. pipe handrail and brackets.	54 m	24.50	1,323	44.30	2,392	68.80	3,715
SUBTOTAL - SPECIALTIES	9.21 /m2 GFA		4,725		12,385		17,111
18. APPLIANCES							
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24 No.	17.00	408	515.00	12,360	532.00	12,768
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24 No.	17.00	408	488.00	11,712	505.00	12,120
18.30 Range hood	24 No.	17.00	408	96.00	2,304	113.00	2,712
18.40 Coin operated dryer.	2 No.	17.00	34	606.00	1,212	623.00	1,246
18.50 Coin operated washer.	2 No.	17.00	34	784.00	1,568	801.00	1,602
SUBTOTAL - APPLIANCES	16.40 /m2 GFA		1,292		29,156		30,448

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24 apt.	628.00	15,072	1,978.00	47,472	2,606.00	62,544
SUBTOTAL - PLUMBING	33.68 /m2 GFA		15,072		47,472		62,544
20. HEATING							
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24 apt.	434.00	10,416	864.00	20,736	1,298.00	31,152
SUBTOTAL - HEATING	16.78 /m2 GFA		10,416		20,736		31,152

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	88.00	2,112	262.00	6,288	350.00	8,400
SUBTOTAL - VENTILATION	4.52 /m2 GFA		2,112		6,288		8,400
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	29.00	696	56.00	1,344	85.00	2,040
SUBTOTAL - FIRE PROTECTION	1.10 /m2 GFA		696		1,344		2,040
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	836.00	20,064	1,130.00	27,120	1,966.00	47,184
SUBTOTAL - ELECTRICAL	25.41 /m2 GFA		20,064		27,120		47,184

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS								
24.10 Site Overheads - setup - supervision - plant - site office - small tools - security - boarding, etc.	24	apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39	/m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT								
25.10 General Contractor's Overhead & Profit - permits - bonds - insurance - office overhead - profit	24	apt.	685.00	16,440	343.00	8,232	1,028.00	24,672
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.29	/m2 GFA		16,440		8,232		24,672
TOTAL - MEDICINE HAT	393.88	/m2 GFA		255,350		476,078		731,429

DETAILED COST ESTIMATES FOR LLOYDMINSTER

1987 ALBERTA HOUSE COST COMPARISON STUDY NOVEMBER 1987

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	891	m3	0.43	383	1.58	1,408	2.01	1,791
1.20	Backfill to basement walls, footings, and bases.	188	m3	0.39	73	1.40	263	1.79	337
1.30	150 mm gravel or sand bed under slab on grade.	70	m3	3.15	221	10.60	742	13.75	963
1.40	.152 mm polyethylene vapour barrier on gravel or sand bed.	501	m2	0.84	421	0.24	120	1.08	541
	SUBTOTAL - EXCAVATION	1.96	/m2 GFA		1,098		2,533		3,631
2. CONCRETE									
2.10	25 MPa concrete in footings and basement walls (material only) 200 mm reinforced concrete wall, 250 x 560 mm reinforced concrete footing.	58	m3	0.00	0	111.70	6,479	111.70	6,479
2.20	Reinforcing steel in footings and basement walls (material only).	1,652	kg	0.00	0	0.64	1,057	0.64	1,057
2.30	Form, place rebar and pour concrete in footing (560 x 250 mm) -subcontract	222	m	4.69	1,041	2.95	655	7.64	1,696

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.35	Form, place rebar, and pour concrete in basement wall (1.2 m high) (subcontract)	96	m	13.45	1,291	9.22	885	22.67	2,176
2.40	90 mm concrete (20 MPa) in slab on grade.	456	m2	3.91	1,783	9.32	4,250	13.23	6,033
2.45	150 x 150 mm welded wire mesh reinforcement to slab on grade (material only).	456	m2	0.00	0	3.07	1,400	3.07	1,400
2.55	38 mm thick rigid insulation to concrete wall (basement).	117	m2	2.09	245	4.44	519	6.53	764
2.60	Parging to concrete walls.	29	m2	8.90	258	3.68	107	12.58	365
	SUBTOTAL - CONCRETE	10.75	/m2 GFA		4,618		15,352		19,970
3. DAMPROOFING									
3.10	Two coats asphaltic emulsion on concrete walls.	159	m2	0.29	46	0.29	46	0.58	92
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	96	m	3.60	346	4.64	445	8.24	791
	SUBTOTAL - DAMPROOFING	0.48	/m2 GFA		392		492		883
4. SIDING									
4.10	Prefinished aluminum siding	98	m2	6.48	635	14.08	1,380	20.56	2,015

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.40	Stained dark-brown cedar siding 25 x 150 mm channel to column.	700 FBM	0.75	525	1.21	847	1.96	1,372
4.50	Stucco on wire mesh incl. building paper.	678 m2	13.54	9,180	6.98	4,732	20.52	13,913
4.60	24 ga. aluminum vented metal soffit c/w edge moulding.	59 m2	5.96	352	12.64	746	18.60	1,097
	SUBTOTAL - SIDING	9.91 /m2 GFA		10,692		7,705		18,397
5. ROOFING/SHEET METAL								
5.10	Built-up asphalt roofing completed with mineral granular and flashing.	527 m2	21.20	11,172	21.05	11,093	42.25	22,266
5.30	R.S.I. 6 (R34) batt insulation in joist space.	527 m2	1.62	854	9.20	4,848	10.82	5,702
5.40	.102 mm polyethylene vapour barrier.	580 m2	0.26	151	0.24	139	0.50	290
5.50	Prefinished flashing over window.	66 m	1.83	121	3.86	255	5.69	376
	SUBTOTAL - ROOFING/SHEET METAL	15.42 /m2 GFA		12,298		16,336		28,633
6. CARPENTRY (ROUGH)								
6.10	Material Only No. 2 grade fir or spruce as below floor joists (38 x 235 mm) - fir built-up beam (3-38 x 235 mm) - fir built-up beam (2-38 x 235 mm) - fir roof joist (38 x 235 mm) - spruce	38.0 MFBM	0.00	0	747.00	28,386	747.00	28,386

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.20	Material Only No. 2 grade fir or spruce as below framing (38 x140 mm) - fir plate (38 x 140 mm) - fir cross bridging (38 x 38 mm) - spruce framing (38 x 89 mm) - spruce framing (38 x 140 mm) - spruce blocking (38 x 89 mm) - spruce blocking (38 x 140 mm) - spruce wall strapping (38 x 38 mm) - spruce fascia (19 x 140 mm) - spruce	44.0 MFBM	0.00	0	559.00	24,596	559.00	24,596
6.30	Material Only - Sheathing 19 mm plywood (floor underlay) 1432 m2 13 mm tentest (u/s of joist) 1368 m2 10 mm plywood (roof sheathing) 524 m2 13 mm plywood (wall sheathing - protection board 350mm high) 19 m2 8 mm plywood (wall sheathing) 727 m2	4,070 m2	0.00	0	8.81	35,857	8.81	35,857
6.40	Labour Only - complete framing including installation of windows.	1,857 m2	22.70	42,154	0.00	0	22.70	42,154
6.50	90 x 238 mm wide R.S.I. 2.1 (R12) batt insulation (vertical eaves).	99 m	0.43	43	0.75	74	1.18	117
	SUBTOTAL - CARPENTRY (ROUGH)	70.60 /m2 GFA		42,196		88,913		131,109

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.	CARPENTRY (FINISH)							
7.10	Stair - 6 flights @ (2x6x8 = 96 risers) 38 x 300 mm stringers 59 m 38 x 235 mm treads 103 m 6 x 275 mm fir plywood in risers 115 m	2 No.	627.00	1,254	417.00	834	1,044.00	2,088
7.30	Select grade fir in window and door trim and base (40 x 12 mm) - window 431 m - door 555 m - base 2328 m	3,314 m	1.07	3,546	1.14	3,778	2.21	7,324
	SUBTOTAL - CARPENTRY (FINISH)	5.07 /m2 GFA		4,800		4,612		9,412
8.	WINDOWS AND GLAZING							
8.10	Double-glazed patio door in wood frame with aluminum cladding and including hardware (size 2.4 x 1.8 m).	18 No.	0.00	0	917.00	16,506	917.00	16,506
8.20	Double-glazed wired glass sealed window in steel frame (size 2.4 x2.55 m).	4 No.	0.00	0	878.00	3,512	878.00	3,512
8.30	Double-glazed sliding units in wood frame (size 2.4 x .9 m) including aluminum sliders, screen, and hardware.	6 No.	0.00	0	245.00	1,470	245.00	1,470

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
8.40 Double-glazed sliding units in wood frame (size 1.5 x .9 m) including aluminum sliders, screen, and hardware.	28 No.	0.00	0	165.00	4,620	165.00	4,620
8.50 Double-glazed sliding units in wood frame (size .9 x .9 m) including aluminum sliders, screen, and hardware.	3 No.	0.00	0	135.00	405	135.00	405
SUBTOTAL - WINDOWS AND GLAZING	14.28 /m2 GFA		0		26,513		26,513
9. SEALANTS							
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	725 m	0.41	297	0.28	203	0.69	500
9.20 Caulk (interior) - ceramic tile	227 m	1.08	245	0.58	132	1.66	377
SUBTOTAL - SEALANTS	0.47 /m2 GFA		542		335		877
10. Doors							
10.03 Exterior - Aluminum entrance and sidelight, (size 2.4 x 2.1 m overall) including .9 x 2.1 m aluminum glazed door c/w door closer, push and pull, lock and aluminum threshold.	3 No	254.00	762	1,745.00	5,235	1,999.00	5,997

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.06 Fire rated door and sidelight with 0.9 x 2.1 m, 20 min. label wood door and pressed steel frame including hardware and 6 mm wire glass to sidelight - 4 No. 1.9 x 2.1 m - 4 No. 1.4 x 2.1 m	8	No.	196.00	1,568	1,229.00	9,832	1,425.00	11,400
10.09 Solid core door and frame, rotary cut mahogany - 24 No. .9x2.1mx44mm (20 min. label) - 26 No. .85 x 2.1m x 44mm	50	No.	23.00	1,150	201.00	10,050	224.00	11,200
10.10 Solid core door and frame, rotary cut mahogany - 1 No. .9x2.1mx44mm (45 min. label)	1	No.	23.00	23	249.00	249	272.00	272
10.20 Hollow core door and frame, rotary cut mahogany face - 24 No. .70 x 2.0 m x 35mm - 24 No. .75 x 2.0 m x 35mm	48	No.	12.75	612	42.39	2,035	55.14	2,647
10.25 Metal door labelled (1 hour) c/w fire rated pressed steel frame - 1 No. .9 x 2.1 m x 45 mm	1	No.	23.00	23	226.00	226	249.00	249

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.30 Metal folding bi-fold doors, with tracks and pulls - 28 No. 1.8 x 2.0 m - 14 No. 1.5 x 2.0 m - 6 No. 1.2 x 2.0 m - 14 No. 0.9 x 2.0 m - 16 No. 0.6 x 2.0 m	78 No.	12.75	995	132.00	10,296	144.75	11,291
SUBTOTAL - DOORS	23.19 /m2 GFA		5,133		37,923		43,055
11. HARDWARE							
11.15 Lock sets to interior doors.	25 set	12.00	300	24.05	601	36.05	901
11.25 Butts to interior doors. (included with frames)	129 pair	0.00	0	0.00	0	0.00	0
11.30 Latch sets.	81 set	8.25	668	10.40	842	18.65	1,511
11.40 Bathroom privacy latch sets.	24 set	8.25	198	12.55	301	20.80	499
11.50 Door closers (rated).	14 No.	13.75	193	28.30	396	42.05	589
SUBTOTAL - HARDWARE	1.88 /m2 GFA		1,359		2,141		3,500
12. CERAMIC TILING							
12.10 Ceramic tile 100 x 100 x 6 mm thinset on drywall.	137 m2	30.00	4,110	24.37	3,339	54.37	7,449
SUBTOTAL - CERAMIC TILING	4.01 /m2 GFA		4,110		3,339		7,449

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD							
13.10 Gypsum wallboard (13mm standard) on walls, taped and sanded.	3,906 m2	3.44	13,437	2.04	7,968	5.48	21,405
13.13 Gypsum wallboard (13mm fire rated) taped and sanded. - walls 705 m2 - stair soffit 29 m2	734 m2	3.80	2,789	2.57	1,886	6.37	4,676
13.14 Gypsum wallboard (15.9 mm thick), taped and sanded.	487 m2	3.80	1,851	3.16	1,539	6.96	3,390
13.15 Gypsum wallboard (15.9mm fire rated) to shaft enclosure, taped and sanded.	63 m2	5.86	369	3.37	212	9.23	581
13.16 Gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling, taped and sanded.	1,887 m2	4.82	9,095	3.49	6,586	8.31	15,681
13.17 2 layers gypsum wallboard (15.9mm fire rated with sound barrier) on ceiling,taped and sanded.	4 m2	7.83	31	7.24	29	15.07	60
13.30 Tentest board, Crane 3-183 Redcliffe	524 m2	4.32	2,264	3.06	1,603	7.38	3,867
13.40 Finish to ceilings - textured	1,425 m2	1.37	1,952	1.17	1,667	2.54	3,620

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13.70 .102 mm polyethylene vapour barrier.	1,346	m2	0.26	350	0.24	323	0.50	673
13.83 Batt insulation RSI - 3.5 (R20) to exterior walls.	728	m2	0.80	582	5.58	4,062	6.38	4,645
13.86 Batt insulation RSI - 3.5 (R20) to interior walls.	908	m2	0.80	726	5.58	5,067	6.38	5,793
SUBTOTAL - WALLBOARD	34.67	/m2 GFA		33,447		30,943		64,390
14. FLOORING								
14.10 Sheet vinyl flooring (.065 gauge) with adhesive to subfloor.	364	m2	6.04	2,199	11.65	4,241	17.69	6,439
14.20 20 oz, 100% Nylon carpet c/w 13 mm thick chip foam underlay.	1,296	m2	3.60	4,666	14.60	18,922	18.20	23,587
14.30 'Neoprene Hypalon' waterproofing or equal to balcony.	67	m2	19.46	1,304	24.06	1,612	43.52	2,916
14.40 Gypcrete floor topping including steel trowel finish.	1,338	m2	8.10	10,838	4.03	5,392	12.13	16,230
SUBTOTAL - FLOORING	26.48	/m2 GFA		19,006		30,166		49,172
15. PAINTING								
15.12 Exterior work - Prepare, prime, two coats enamel on fascia board to balconies and entrance canopy.	26	m2	4.43	115	1.22	32	5.65	147

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.14 Prepare, prime, two coats enamel on metal handrail and balustrade.	783 m	1.51	1,182	0.92	720	2.43	1,903
15.22 Interior work - Prepare, one coat primer sealer, one coat latex or semigloss paint on gypsum wallboard - walls 4962 m2 - ceiling 234 m2	5,196 m2	2.24	11,639	0.69	3,585	2.93	15,224
15.30 Two coats urethane varnish on doors and frames.	105 No.	25.60	2,688	5.78	607	31.38	3,295
15.40 Prepare, prime, one coat semigloss on base, door and window trim.	2,328 m	0.72	1,676	0.15	349	0.87	2,025
15.50 Prepare, prime, one coat semigloss on shelving.	94 m2	2.36	222	0.46	43	2.82	265
SUBTOTAL - PAINTING	12.31 /m2 GFA		17,523		5,337		22,859
16. FITTINGS							
16.10 Shelving - Douglas fir plywood, lipped one edge (20 mm thick x .45 m)	107 m	3.42	366	5.73	613	9.15	979

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
16.20 Vanity and cabinets, plastic laminated top to lower cabinets and c/w drawers, shelves, etc.									
- lower vanity and cupboard	27 m								
- wall units	99 m								
- worktop unit	69 m	195	m	31.80	6,201	217.00	42,315	248.80	48,516
SUBTOTAL - FITTINGS		26.65	/m2 GFA		6,567		42,928		49,495
17. SPECIALTIES									
17.10 Washroom accessories									
- 24 No. toilet paperholders									
- 24 No. soap dishes									
- 48 No. towel bars		96	No.	5.75	552	8.36	803	14.11	1,355
17.20 Medicine cabinet		24	No.	11.50	276	37.62	903	49.12	1,179
17.30 25 mm dia. chrome shower curtain rod.		24	No.	6.25	150	7.30	175	13.55	325
17.40 Mail box and house numbers (size .81 x .45 m) for 24 apts.		1	set	59.75	60	387.00	387	446.75	447
17.50 18 mm dia. chrome coat rods.		24	No.	3.50	84	5.15	124	8.65	208
17.60 Drapery tracks.		102	m	3.61	368	8.84	902	12.45	1,270

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17.70 970 mm high metal railing c/w balusters 100 mm o.c. max. to balconies.	98 m	11.50	1,127	44.50	4,361	56.00	5,488
17.80 Metal balustrade to stairs c/w vinyl cap.	66 m	11.50	759	39.50	2,607	51.00	3,366
17.90 50 mm dia. pipe handrail and brackets.	54 m	24.75	1,337	45.50	2,457	70.25	3,794
SUBTOTAL - SPECIALTIES	9.39 /m2 GFA		4,712		12,718		17,430
18. APPLIANCES							
18.10 Freestanding range, 760 mm (30") top four surface elements, oven auto timer.	24 No.	16.75	402	514.00	12,336	530.75	12,738
18.20 Electric refrigerator, manual defrost .37 m3 (13 cu. ft.) capacity	24 No.	16.75	402	489.00	11,736	505.75	12,138
18.30 Range hood	24 No.	16.75	402	106.00	2,544	122.75	2,946
18.40 Coin operated dryer.	2 No.	16.75	34	613.00	1,226	629.75	1,260
18.50 Coin operated washer.	2 No.	16.75	34	794.00	1,588	810.75	1,622
SUBTOTAL - APPLIANCES	16.53 /m2 GFA		1,273		29,430		30,703

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : -24 No. water closets -32 No. lavatory basins -24 No. baths (5') - 1 No. mop service basin - 1 No. laundry tub (The above Crane or equal) -24 No. kitchen sinks, compartment, stainless steel. - 1 No. water heater and storage tank, cap. 300 MBH - 1 No. domestic hot water recirculating pump and accessories. - rough-in, waste and vent - roof drains	24	apt.	590.00	14,160	1,920.00	46,080	2,510.00	60,240
SUBTOTAL - PLUMBING	32.44	/m2 GFA		14,160		46,080		60,240
20. HEATING								
20.10 Hot water circulation system (268 m total length) c/w radiators, 24 control valves, one centrifugal circulation pump, complete with all piping, 50 gallon expansion tank, hot water heating boiler and gas supply system.	24	apt.	592.00	14,208	1,240.00	29,760	1,832.00	43,968
SUBTOTAL - HEATING	23.68	/m2 GFA		14,208		29,760		43,968

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. VENTILATION							
21.10 Ventilation system, complete for 24-unit apartment building with all ductwork and fans.	24 apt.	96.00	2,304	288.00	6,912	384.00	9,216
SUBTOTAL - VENTILATION	4.96 /m2 GFA		2,304		6,912		9,216
22. FIRE PROTECTION							
22.10 Fire protection system, complete for 24-unit apartment building.	24 apt.	36.00	864	73.00	1,752	109.00	2,616
SUBTOTAL - FIRE PROTECTION	1.41 /m2 GFA		864		1,752		2,616
23. ELECTRICAL							
23.10 Complete electrical installation including fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fan, door-bell with two presses, 100 A service board and fire alarm system (includes for elect. fixtures.)	24 apt.	1,130.00	27,120	1,386.00	33,264	2,516.00	60,384
SUBTOTAL - ELECTRICAL	32.52 /m2 GFA		27,120		33,264		60,384

WALK - UP APARTMENT

GROSS FLOOR AREA : 1857 m2

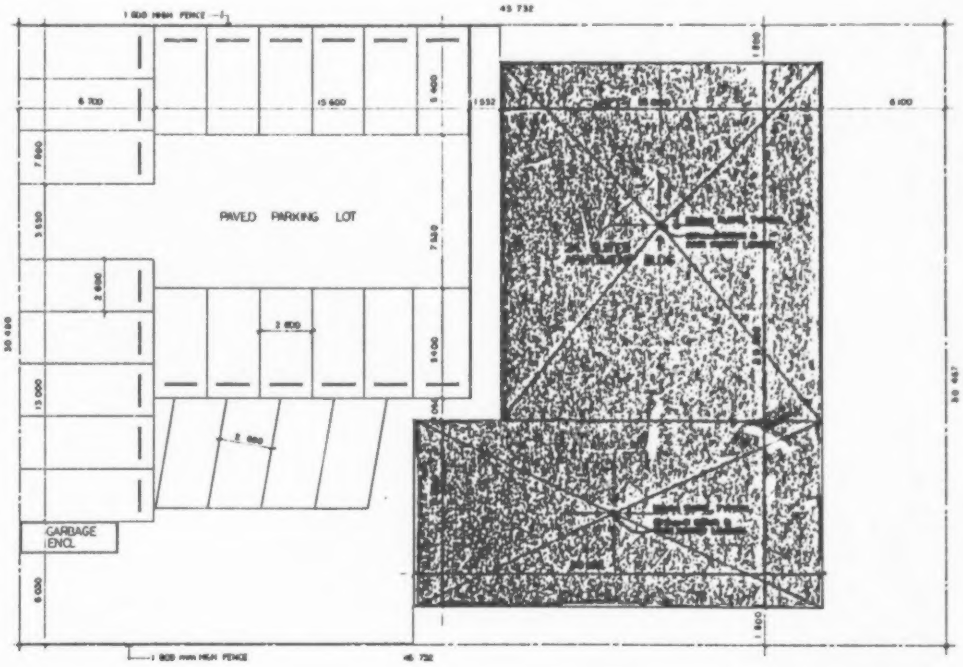
LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
24. SITE OVERHEADS							
24.10 Site Overheads - setup - supervision - plant - site office - small tools - security - boarding, etc.	24 apt.	1,357.00	32,568	684.68	16,432	2,041.68	49,000
SUBTOTAL - SITE OVERHEADS	26.39 /m2 GFA		32,568		16,432		49,000
25. GENERAL CONTRACTOR'S OVERHEADS & PROFIT							
25.10 General Contractor's Overhead & Profit - permits - bonds - insurance - office overhead - profit	24 apt.	680.00	16,320	343.00	8,232	1,023.00	24,552
SUBTOTAL - GEN.CONTRACTOR'S OH.& PROFIT	13.22 /m2 GFA		16,320		8,232		24,552
TOTAL - LLOYDMINSTER	418.66 /m2 GFA		277,310		500,148		777,454

APPENDIX

Reduced Drawings : Walk-Up Apartment


1 800 HIGH FENCE
45 732
6 700
15 600
5 400
1 532
6 100
1 800
7 800
3 530
PAVED PARKING LOT
7 320
2 600
2 600
5 400
30 400
30 467
13 000
2 600
GARBAGE ENCL
6 000
1 800
1 800 mm HIGH FENCE
45 732
BLDG

STATISTICS

SITE AREA 1394m²

SUITES 24 ONE BEDROOM

BUILDING
AREA 465m²

PARKING 24 CARS

THE BUILDING IS REQUIRED TO FACE AT LEAST ONE STREET.

ACCESS WALL PANELS -OR- WINDOW SHALL BE PROVIDED ON SECOND AND THIRD FLOOR IN AT LEAST 1 WALL FACING ON A STREET.

SPECIAL SEPARATIONS BETWEEN BUILDINGS.

THE MAXIMUM PERCENTAGE OF UNPROTECTED OPENINGS IN AN EXPOSED BUILDING FACE SHALL CONFORM TO THE REQUIREMENTS OUTLINED IN THE ALBERTA BUILDING CODE. (9.10.14.)

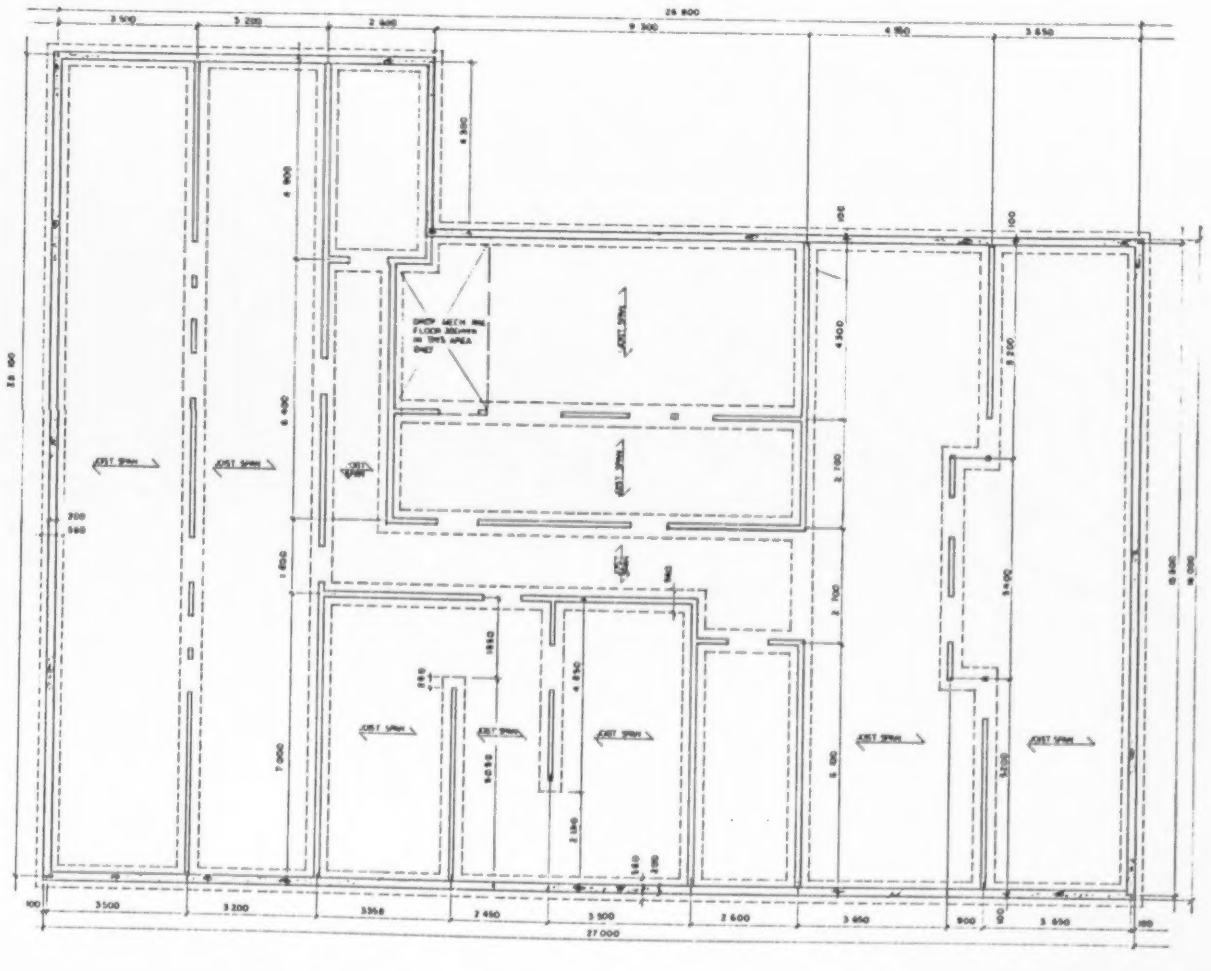
ONE SET OF EXAMINED DRAWINGS SHALL BE AVAILABLE CONTINUOUSLY AT THE CONSTRUCTION SITE DURING WORKING HOURS FOR INSPECTION BY THE AUTHORITY HAVING JURISDICTION.

ALBERTA HOUSE COST COMPARISON STUDY

SITE PLAN

SCALE 1:100

0 1 2 3 4 5 6 7 8 9 10m


26 800
3 500
3 200
2 600
9 300
4 950
3 650
28 100
4 300
6 900
6 400
1 800
7 000
100
100
4300
2 700
2 700
6 100
3 200
3400
5200
280
1850
5050
4 850
2 190
540
200
560
540
DROP MECH RM. FLOOR 300mm IN THIS AREA ONLY
JOIST SPAN
15 800
16 000
100
3500
3 200
3368
2 450
3 500
2 600
3 650
900
100
3 650
100
27 000

ALBERTA HOUSE COST COMPARISON STUDY
FOUNDATION PLAN
SCALE 1:50

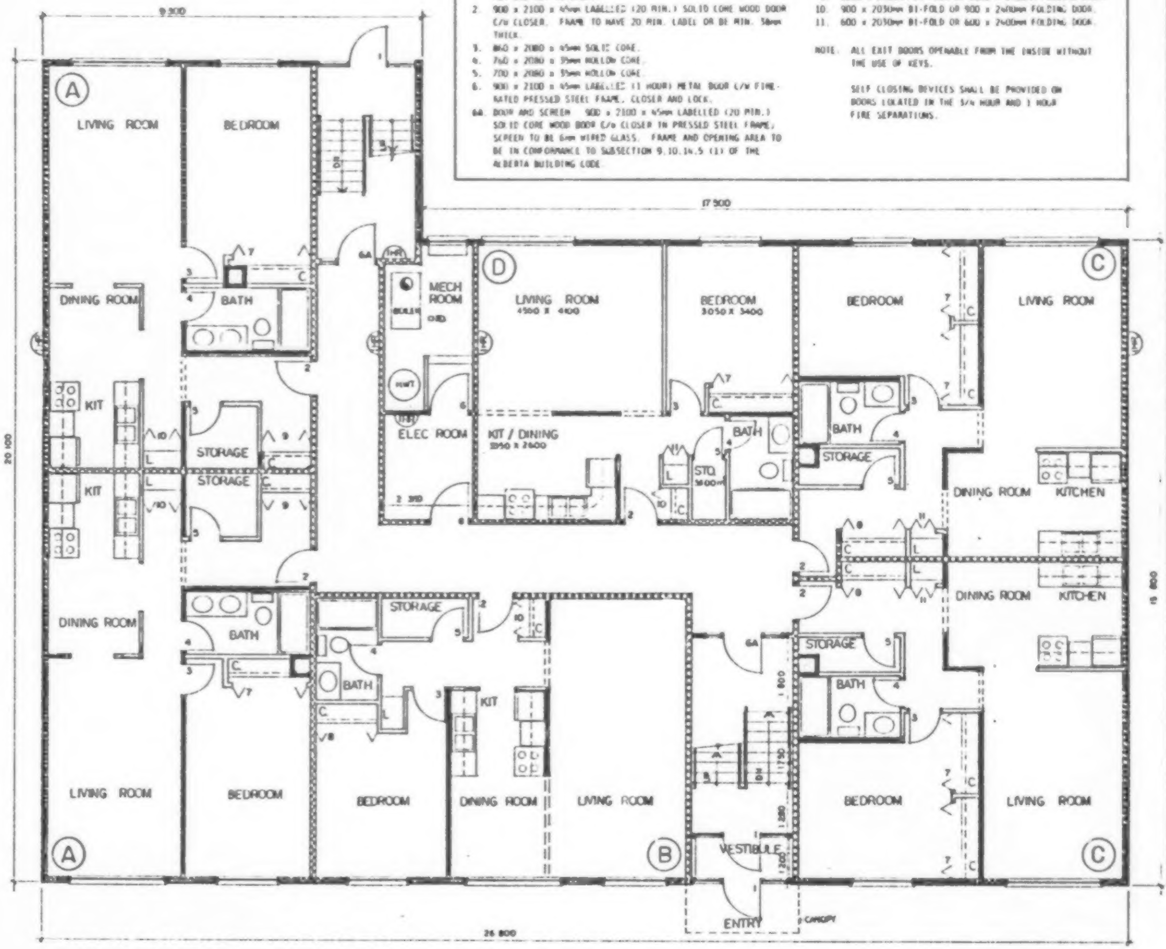
0 .5 1 2 3 4 5 6M

DOOR SCHEDULE

1. 900 x 2100mm ALUMINUM GLAZED DOOR C/W DOOR CLOSER, PUSH AND PULL, LOCK AND THRESHOLD. (NOTE: FROM INSIDE SHOULD NOT USE KEY TO OPEN)
2. 900 x 2100 x 45mm LABELLED (20 MIN.) SOLID CORE WOOD DOOR C/W CLOSER. FRAME TO HAVE 20 MIN. LABEL OR BE MIN. 50mm THICK.
3. 860 x 2080 x 45mm SOLID CORE.
4. 760 x 2080 x 35mm HOLLOW CORE.
5. 700 x 2080 x 35mm HOLLOW CORE.
6. 900 x 2100 x 45mm LABELLED (1 HOUR) METAL DOOR C/W FIRE-RATED PRESSED STEEL FRAME, CLOSER AND LOCK.
6A. DOOR AND SCREEN 900 x 2100 x 45mm LABELLED (20 MIN.) SOLID CORE WOOD DOOR C/W CLOSER IN PRESSED STEEL FRAME. SCREEN TO BE 6mm WIRED GLASS. FRAME AND OPENING AREA TO BE IN CONFORMANCE TO SUBSECTION 9.10.14.5 (1) OF THE ALBERTA BUILDING CODE.
7. 1800 x 2080mm BI-FOLD OR 1800 x 2400mm FOLDING DOOR.
8. 1500 x 2080mm BI-FOLD OR 1800 x 2400mm FOLDING DOOR.
9. 1200 x 2080mm BI-FOLD OR 1200 x 2400mm FOLDING DOOR.
10. 900 x 2030mm BI-FOLD OR 900 x 2400mm FOLDING DOOR.
11. 600 x 2030mm BI-FOLD OR 600 x 2400mm FOLDING DOOR.

NOTE: ALL EXIT DOORS OPENABLE FROM THE INSIDE WITHOUT THE USE OF KEYS.

SELF CLOSING DEVICES SHALL BE PROVIDED ON DOORS LOCATED IN THE 3/4 HOUR AND 1 HOUR FIRE SEPARATIONS.



WALL LEGEND

EXTERIOR STUD WALL C/W 38 x 38mm STRAPPING TO FOUNDATION WALL. SIDING OR STUCCO, BUILDING PAPER, 38 x 140mm STUDS @ 400mm O.C., RSI 3.5 MINERAL WOOL INSULATION, VAPOUR BARRIER, 12.7mm GYPSUM BOARD.

EXTERIOR STUD WALL 1 HOUR FIRE RESISTANCE RATING. C/W 38 x 38mm STRAPPING TO FOUNDATION WALL. NON-COMBUSTIBLE SIDING OR STUCCO, BUILDING PAPER, 38 x 140mm STUDS @ 400mm O.C., RSI 3.5 MINERAL WOOL INSULATION WITH DENSITY OF 1.2KG/m², VAPOUR BARRIER, 15.9mm TYPE X GYPSUM BOARD.

EXTERIOR STUD WALL. SIDING OR STUCCO, BUILDING PAPER, 38 x 89mm STUDS @ 400mm O.C., RSI 2.1 MINERAL WOOL INSULATION, VAPOUR BARRIER, 12.7mm GYPSUM BOARD.

EXTERIOR STUD WALL 1 HOUR FIRE RESISTANCE RATING, NON-COMBUSTIBLE SIDING OR STUCCO, BUILDING PAPER, 38 x 89mm STUDS @ 400mm O.C., RSI 2.1 MINERAL WOOL INSULATION WITH DENSITY OF 1.2KG/m², VAPOUR BARRIER, 15.9mm TYPE X GYPSUM BOARD.

INTERIOR WALL (3/4 HOUR FIRE SEPARATION) 2 ROWS OF 38 x 89mm STUDS, EACH SET 400mm O.C. STAGGERED ON COMMON 38 x 140mm PLATE, MINERAL FIBRE WITH A MASS OF AT LEAST 1.2KG/m² ON EACH SIDE, 12.7mm GYPSUM BOARD, BOTH SIDES.

INTERIOR WALL 12.7mm GYPSUM BOARD BOTH SIDES OF 38 x 140mm STUDS.

INTERIOR WALL (3/4 HOUR FIRE RESISTANCE RATING) 38 x 89mm STUDS @ 400mm O.C. (BASEMENT - 38 x 140mm STUDS) AND 12.7mm TYPE X GYPSUM BOARD, BOTH SIDES.

INTERIOR WALL (1 HOUR FIRE SEPARATION) 2 ROWS OF 38 x 89mm STUDS, EACH SET 400mm O.C. STAGGERED ON COMMON 38 x 140mm PLATE, MINERAL FIBRE ON EACH SIDE, 15.9mm TYPE X GYPSUM BOARD, BOTH SIDES.

INTERIOR WALL (1 HOUR FIRE SEPARATION) 38 x 140mm STUDS @ 400mm O.C. AND 15.9mm TYPE X GYPSUM BOARD BOTH SIDES.

INTERIOR WALL 38 x 89mm STUDS AT 400mm O.C. AND 12.7mm GYPSUM BOARD, BOTH SIDES.

DROP BEAM

NOTES

- DOUBLE STUDS UNDER ALL BEARING POINTS AND ALL OPENINGS.
- LINTELS: 2 - 38 x 235mm BUILT-UP LINTEL, HORIZONTALLY ABOVE ALL OPENINGS.
- BALCONY CANTILEVERED JOISTS SHALL EXTEND INTO BUILDING MINIMUM 2400mm.

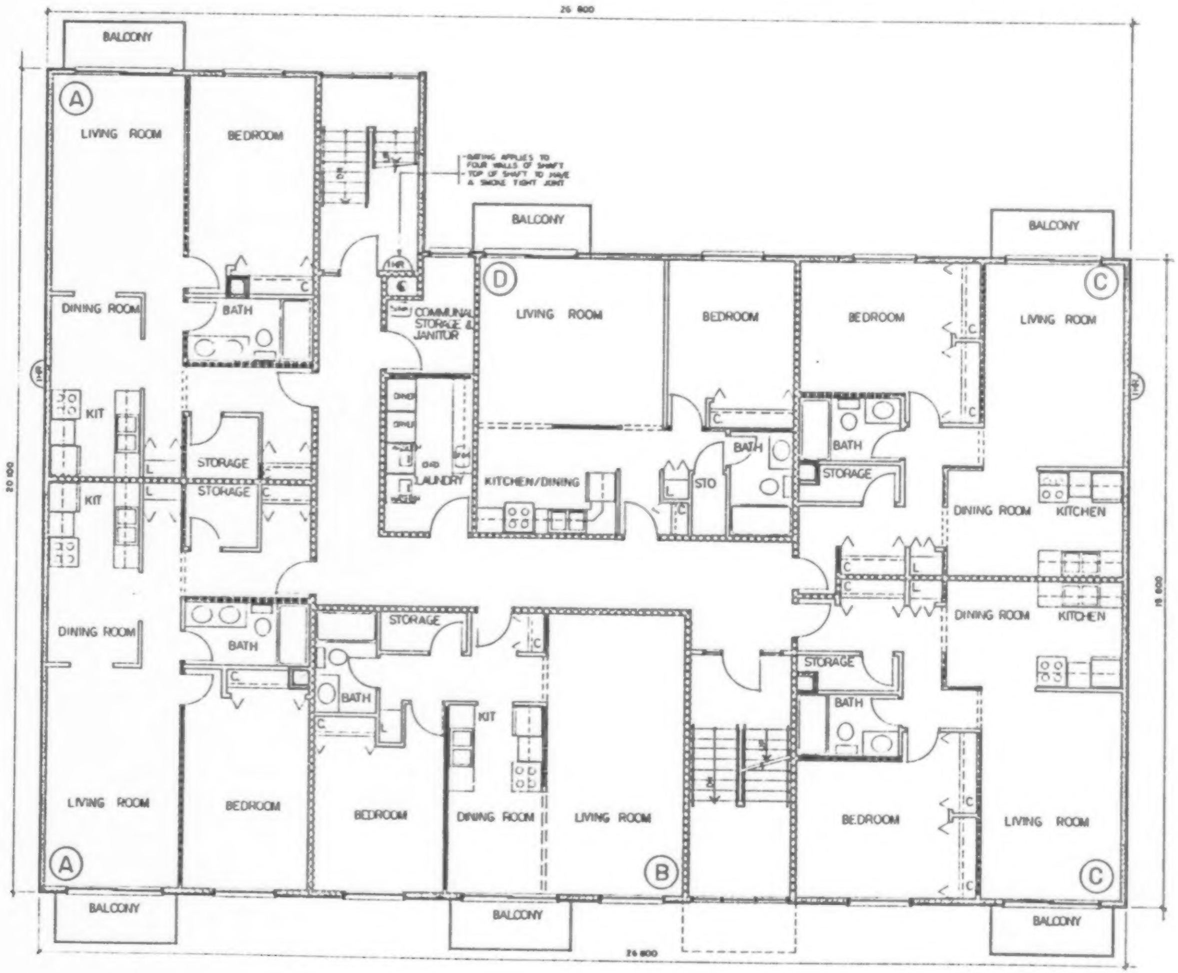
SHAFT ENCLOSURE: 3/4 FIRE RESISTANCE RATING AND STC OF 45. 15.9mm TYPE X GYPSUM BOARD, 57mm x .530mm THICK GALVANIZED STEEL I-STUDS AT 600mm O.C. AND J-TRACKS TOP AND BOTTOM, RESILIENT FURRING CHANNELS @ 600mm O.C., MINERAL WOOL INSULATION WITH DENSITY OF 1.2KG/m², 19mm GYPSUM CORE BOARD.

ALBERTA HOUSE COST COMPARISON STUDY

BASEMENT FLOOR PLAN

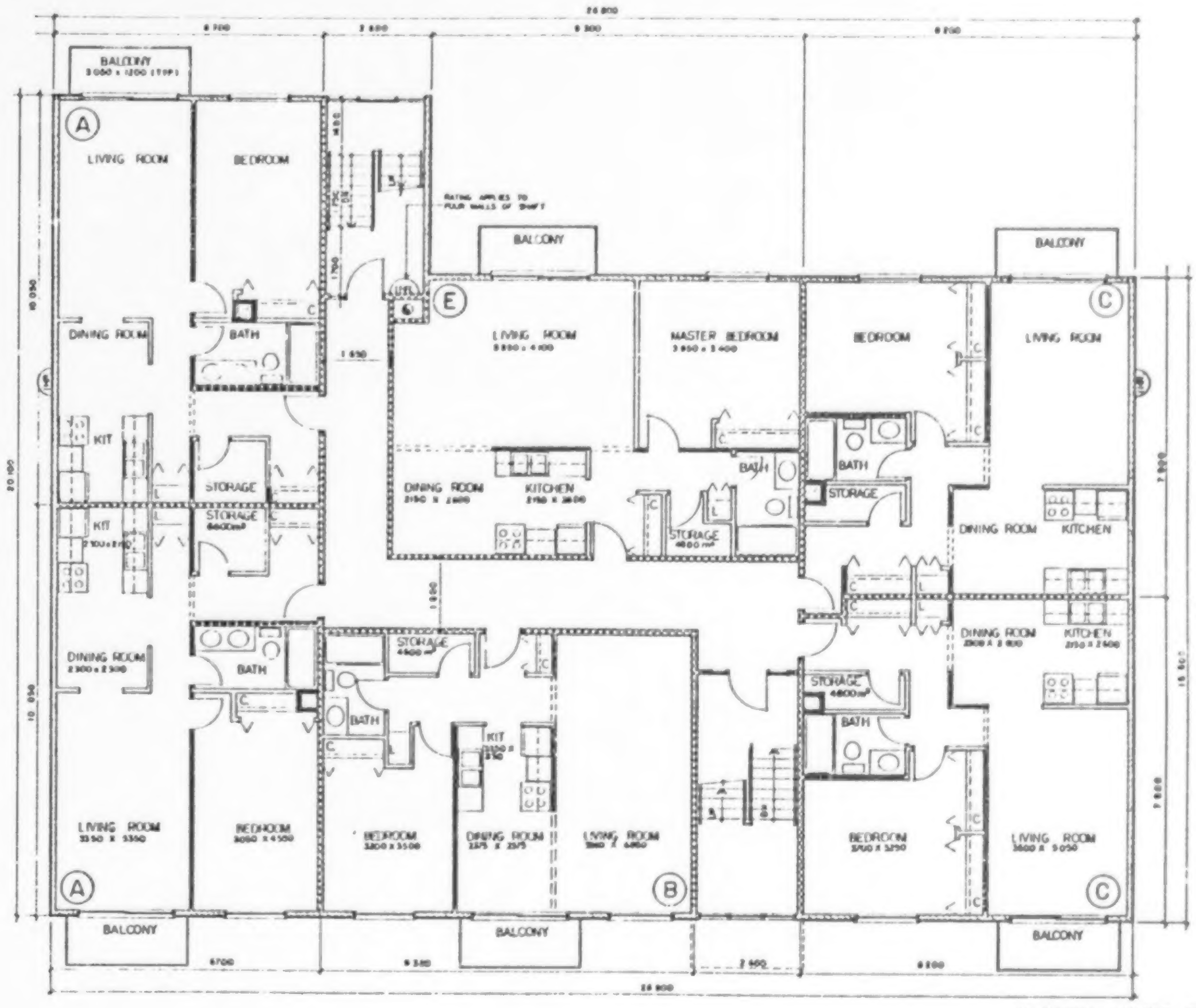
SCALE 1:50

0 .5 1 2 3 4 5 6M


26 800
BALCONY
A
LIVING ROOM
BEDROOM
DINING ROOM
BATH
KIT
STORAGE
STORAGE
KIT
DINING ROOM
BATH
LIVING ROOM
A
BALCONY
RATING APPLIES TO FOUR WALLS OF SHAFT
TOP OF SHAFT TO HAVE A SMOKE TIGHT JOINT
1HR
COMMUNAL STORAGE & JANITOR
LAUNDRY
BALCONY
D
LIVING ROOM
KITCHEN/DINING
BEDROOM
STO
BATH
BEDROOM
BATH
STORAGE
STORAGE
BEDROOM
KIT
DINING ROOM
LIVING ROOM
B
BALCONY
BALCONY
C
LIVING ROOM
DINING ROOM
KITCHEN
DINING ROOM
KITCHEN
STORAGE
BATH
BEDROOM
LIVING ROOM
C
BALCONY
20 100
18 800
26 800

NOTE
SEE BASEMENT FLOOR PLAN
FOR TYPICAL DOOR & BI-FOLD
DOOR TYPES, SIZES & LOCATIONS

ALBERTA HOUSE COST COMPARISON STUDY
MAIN FLOOR PLAN
SCALE 1:50

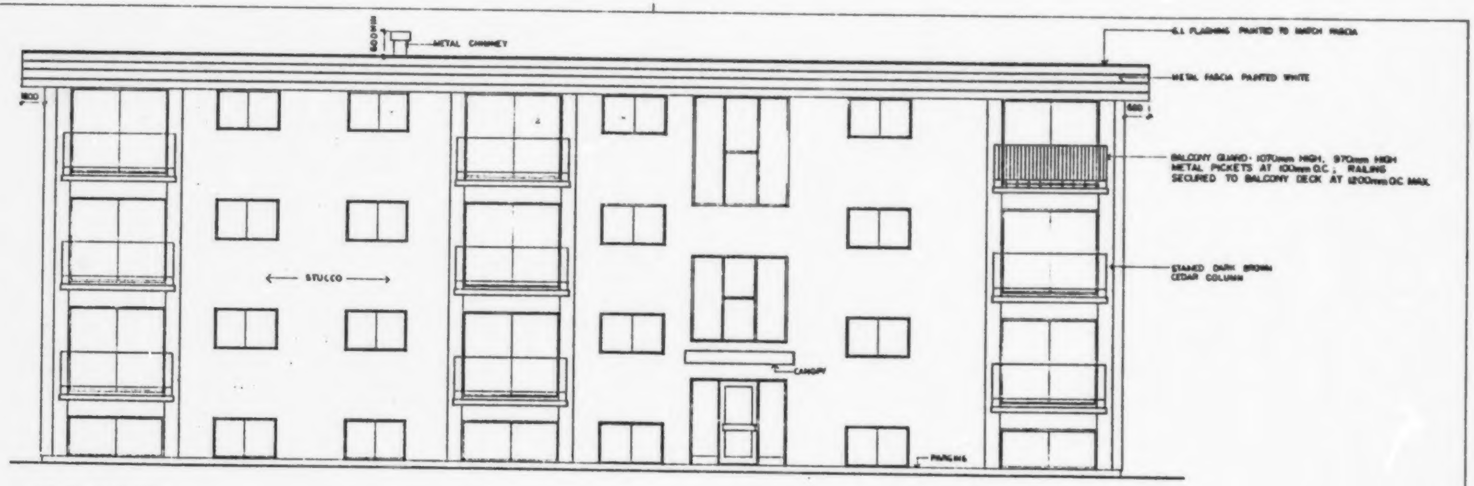

26 800
6 700
2 800
9 300
8 200
BALCONY
3 050 x 1200 (TYP.)
A
LIVING ROOM
BEDROOM
RATING APPLIES TO
FOUR WALLS OF SHAFT
BALCONY
BALCONY
E
C
DINING ROOM
BATH
1 650
LIVING ROOM
3 850 x 4 100
MASTER BEDROOM
3 850 x 3 400
BEDROOM
LIVING ROOM
10 050
20 100
KIT
STORAGE
KIT
2 100 x 2 110
STORAGE
6600 m³
DINING ROOM
2150 x 2600
KITCHEN
2150 x 2600
BATH
STORAGE
4800 m³
BATH
STORAGE
DINING ROOM
KITCHEN
7 800
1 800
DINING ROOM
2300 x 2 300
BATH
STORAGE
4600 m³
BATH
KIT
2100 x 2110
DINING ROOM
2800 x 2 800
KITCHEN
2150 x 2600
STORAGE
4800 m³
BATH
15 600
10 050
LIVING ROOM
3350 x 5350
A
BEDROOM
3050 x 4 500
BEDROOM
3200 x 3 500
DINING ROOM
2375 x 2375
LIVING ROOM
3160 x 6860
B
BEDROOM
3700 x 3250
LIVING ROOM
3600 x 5 050
C
7 800
BALCONY
BALCONY
BALCONY
6700
9 350
2 450
8 200
26 800

NOTE
SEE BASEMENT FLOOR PLAN
FOR TYPICAL DOOR, BI-FOLD
DOOR TYPES, SIZES & LOCATIONS

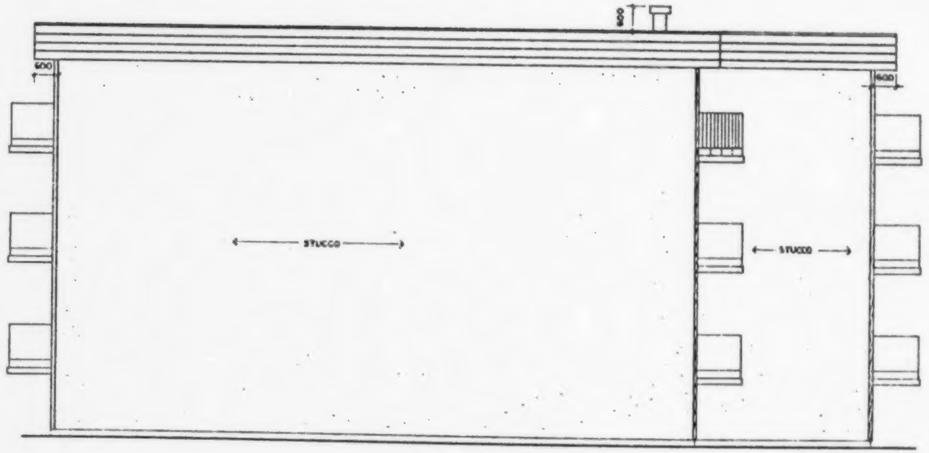
ALBERTA HOUSE COST COMPARISON STUDY

2ND & 3RD FLOOR PLAN

SCALE 1 : 50


800mm
METAL CHIMNEY
G.I. FLASHING PAINTED TO MATCH FASCIA
METAL FASCIA PAINTED WHITE
600
600
BALCONY GUARD: 1070mm HIGH, 970mm HIGH METAL PICKETS AT 100mm O.C.; RAILING SECURED TO BALCONY DECK AT 1200mm O.C. MAX.
STAINED DARK BROWN CEDAR COLUMN
STUCCO
CANOPY
PARGING

FRONT ELEVATION


600
600
600
STUCCO
STUCCO

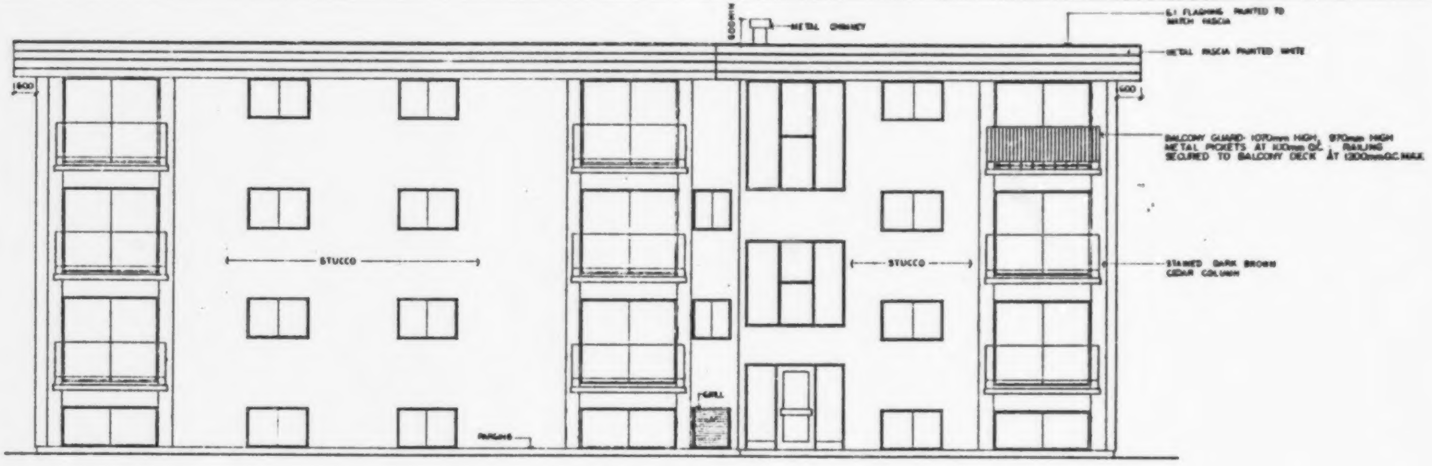
RIGHT ELEVATION

ALBERTA HOUSE COST COMPARISON STUDY

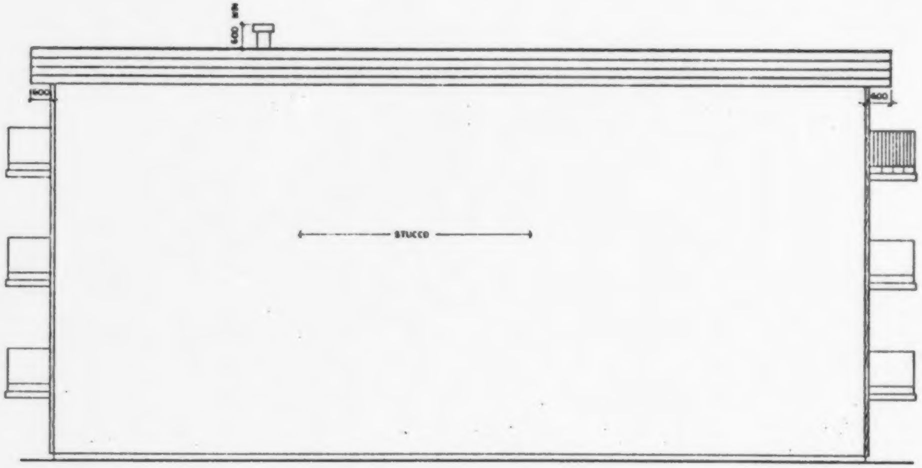
ELEVATIONS

SCALE 1:50

0 .5 1 2 3 4 5 6M


600 MIN
METAL CHIMNEY
6.1 FLASHING PAINTED TO MATCH FASCIA
METAL FASCIA PAINTED WHITE
600
600
BALCONY GUARD- 1070mm HIGH, 970mm HIGH METAL PICKETS AT 110mm O.C., RAILING SECURED TO BALCONY DECK AT 1200mm O.C. MAX.
STAINED DARK BROWN CEDAR COLUMN
STUCCO
STUCCO
PARGING
GRILL

REAR ELEVATION


600 MIN
600
600
STUCCO

LEFT ELEVATION

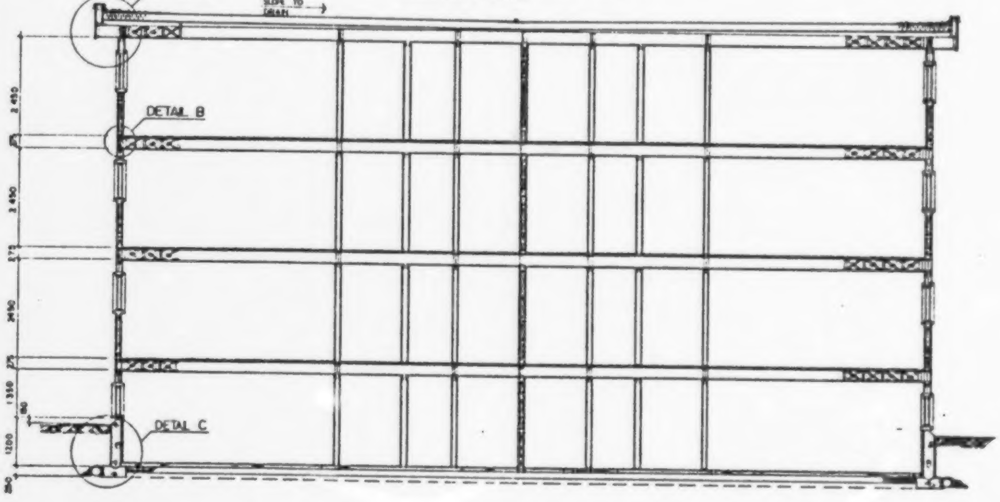
DRAWINGS SHALL BE SIGNED AND SEALED BY A
PROFESSIONAL ENGINEER OR ARCHITECT REGISTERED
IN THE PROVINCE OF ALBERTA.

ALBERTA HOUSE COST COMPARISON STUDY

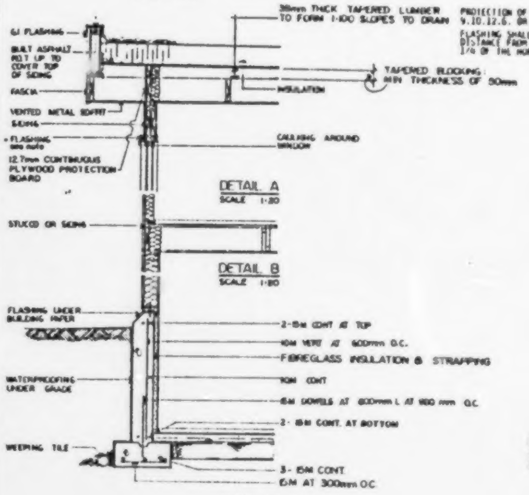
ELEVATIONS

SCALE 1:50

NOTE - SEE SITE PLAN FOR ROOF SLOPE CONFIGURATION
- ACHIEVE SLOPES BY TAPERING 38mm THICK LUMBER AS REQUIRED OVER STRUCTURAL CEILING JOISTS
- MINIMUM ROOF SLOPE 1:100


DETAIL A
DETAIL B
DETAIL C
SLOPE TO DRAIN
2 450
2 450
275
2450
275
1350
150
1200
250

SECTION
SCALE 1:50


GI FLASHING
BUILT ASPHALT ROT UP TO COVER TOP OF SIDING
FASCIA
VENTED METAL SOFFIT
SIDING
* FLASHING see note
12.7mm CONTINUOUS PLYWOOD PROTECTION BOARD
38mm THICK TAPERED LUMBER TO FORM 1:100 SLOPES TO DRAIN
INSULATION
TAPERED BLOCKING: MIN THICKNESS OF 50mm
CAULKING AROUND WINDOW
STUCCO OR SIDING
FLASHING UNDER BUILDING PAPER
WATERPROOFING UNDER GRADE
WEEPING TILE
2-15M CONT AT TOP
10M VERT AT 600mm O.C.
FIBREGLASS INSULATION & STRAPPING
10M CONT
15M DOWELS AT 600mm L AT 900 mm O.C.
2-15M CONT. AT BOTTOM
3-15M CONT.
15M AT 300mm O.C.

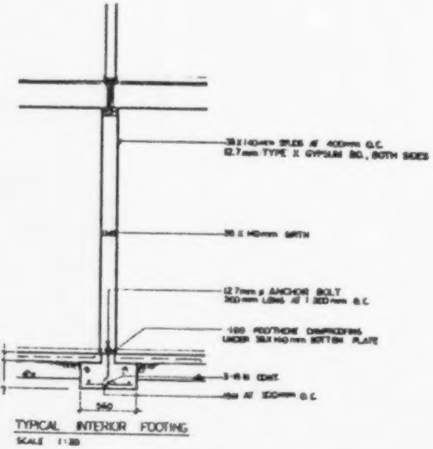
DETAIL A
SCALE 1:20

DETAIL B
SCALE 1:20

DETAIL C
SCALE 1:20

PROTECTION OF SOFFITS SHALL BE PROVIDED AS STATED IN ARTICLES 9.10.12.6. OR 9.10.12.7.

FLASHING SHALL BE APPLIED OVER ALL EXTERIOR OPENINGS WHERE THE VERTICAL DISTANCE FROM THE BOTTOM OF THE EAVE TO THE TOP OF THE TRIM IS MORE THAN 1/4 OF THE HORIZONTAL OVERHANG OF THE EAVE.


38 X 140mm STUDS AT 400mm O.C.
12.7mm TYPE X GYPSUM BD., BOTH SIDES
38 X 140mm BRTH
12.7mm ø ANCHOR BOLT 300mm LONG AT 1 200mm O.C.
.100 POLYTHENE DAMPPROOFING UNDER 38X140mm BOTTOM PLATE
3-15M CONT.
10M AT 300mm O.C.
340
250

TYPICAL INTERIOR FOOTING
SCALE 1:20

ROOF CONSTRUCTION - 1 HOUR FIRE RESISTANCE RATING

- ROOFING GRAVEL
- BUILT-UP ROOFING
- RSI 6 RIGID FIBREGLASS INSULATION AND VAPOUR BARRIER
- 10mm PLYWOOD SHEATHING. ALL EDGES SUPPORTED WITH MIN. 38 x 38mm WOOD BLOCKING
- 38 x 235mm NO. 1 SPRUCE JOISTS AT 400mm O.C
- 38 x 38mm CROSS-BRIDGING
- 15.9mm TYPE X GYPSUM BOARD

NOTE
ALTERNATE INSULATION RSI 6 FIBREGLASS BATT INSULATION SET IN JOIST SPACE

EXTERIOR WALL CONSTRUCTION

TYPE A: NO FIRE RESISTANCE RATING

- SIDING OR STUCCO
- BUILDING PAPER
- RSI 2.1 MINERAL WOOL INSULATION AND VAPOUR BARRIER
- 38 x 89mm WOOD STUDS @ 400mm O.C. (38 x 140mm WOOD STUDS @ 400mm O.C. FOR BASEMENT)
- 12.7mm GYPSUM BOARD

TYPE B: 1 HOUR FIRE RESISTANCE RATING

- SAME AS TYPE A EXCEPT MINERAL WOOL INSULATION TO HAVE DENSITY OF 1.2kG/m², 15.9mm TYPE X GYPSUM BOARD AND STUCCO OR NON-COMBUSTIBLE SIDING

FLOOR CONSTRUCTION

- 3/4 HOUR FIRE SEPARATION AND S.T.C. RATING OF 45
- FLOOR FINISH
- 8mm PLYWOOD UNDERLAY
- 19mm T & G LUMBER OR 15.9mm PLYWOOD OR WAFERBOARD SUBFLOOR WITH MINERAL FIBRE BETWEEN JOISTS SPACED 400mm O.C.
- 38 x 235mm NO. 1 SPRUCE JOISTS AT 400mm O.C.
- 38 x 38mm CROSS-BRIDGING AT 2.1m O.C. MAX.
- RESILIENT CHANNELS
- 15.9mm TYPE X GYPSUM BOARD TYPICALLY EXCEPT FOR MECHANICAL ROOM CEILING APPLY 2 LAYERS OF 15.9mm TYPE X GYPSUM BOARD

CORRIDOR AND DEMISING WALL CONSTRUCTION

- 3/4 HOUR FIRE SEPARATION AND S.T.C. RATING OF 45
- TWO ROWS 38 x 89mm STUDS, EACH SET 400mm O.C. STAGGERED ON COMMON 38 x 140mm PLATE. MINERAL FIBRE WITH A MASS OF AT LEAST 1.2kG/m² ON EACH SIDE
- 12.7mm GYPSUM BOARD, BOTH SIDES.

BEARING WALL CONSTRUCTION

- 3/4 HOUR FIRE RESISTANCE RATING
- 38 x 140mm OR 38 x 89mm WOOD STUDS @ 400mm O.C.
- 12.7mm TYPE X GYPSUM WALLBOARD, BOTH SIDES

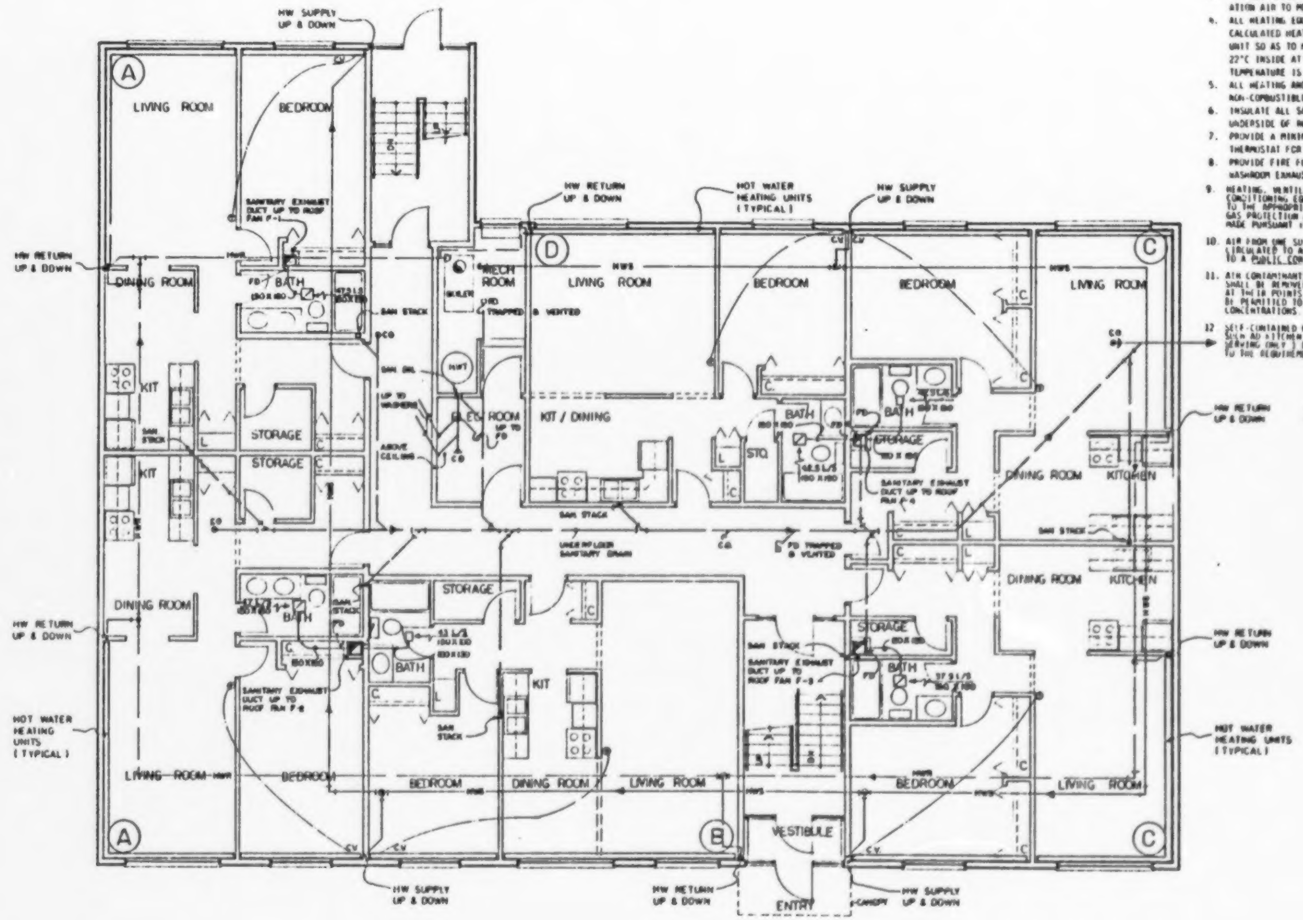
NOTES

*1. PROVIDE GALVANIZED STEEL, GA. .457mm AT THE HEAD OF ALL EXTERIOR OPENINGS.
2. WEEPING TILES SHALL BE LAID ON UNDISTURBED OR WELL-COMPACTED SOIL SO THAT THE TOP OF THE WEEPING TILE IS BELOW THE UNDERSIDE OF THE FLOOR SLAB.
3. ROOF TRUSSES SHALL BE DESIGNED IN CONFORMANCE WITH PART 4 AND FOR THE APPROPRIATE GROUND SNOW LOADS STATED IN TABLE 2.2.1.B. (STANDATA 85-01-008)

ALBERTA HOUSE COST COMPARISON STUDY

SECTION & DETAILS

SCALES : AS SHOWN


HW SUPPLY
UP & DOWN
LIVING ROOM
BEDROOM
SANITARY EXHAUST DUCT UP TO ROOF FAN F-1
HW RETURN
UP & DOWN
DINING ROOM
FD
BATH
SAN STACK
CO
KIT
STORAGE
MECH ROOM
BOILER
HWT
SAN DRL
UP TO WASHERS
ABOVE CEILING
ELEC ROOM
UP TO FD
TRAPPED & VENTED
HOT WATER
HEATING UNITS
(TYPICAL)
LIVING ROOM
KIT / DINING
BEDROOM
STO
STORAGE
SANITARY EXHAUST DUCT UP TO ROOF FAN F-4
DINING ROOM
KITCHEN
UNDERFLOOR SANITARY DRAIN
FD TRAPPED & VENTED
SANITARY EXHAUST DUCT UP TO ROOF FAN F-3
SANITARY EXHAUST DUCT UP TO ROOF FAN F-2
DINING ROOM
VESTIBULE
ENTRY
CANOPY
CV
HWS
HWR
A
B
C
D

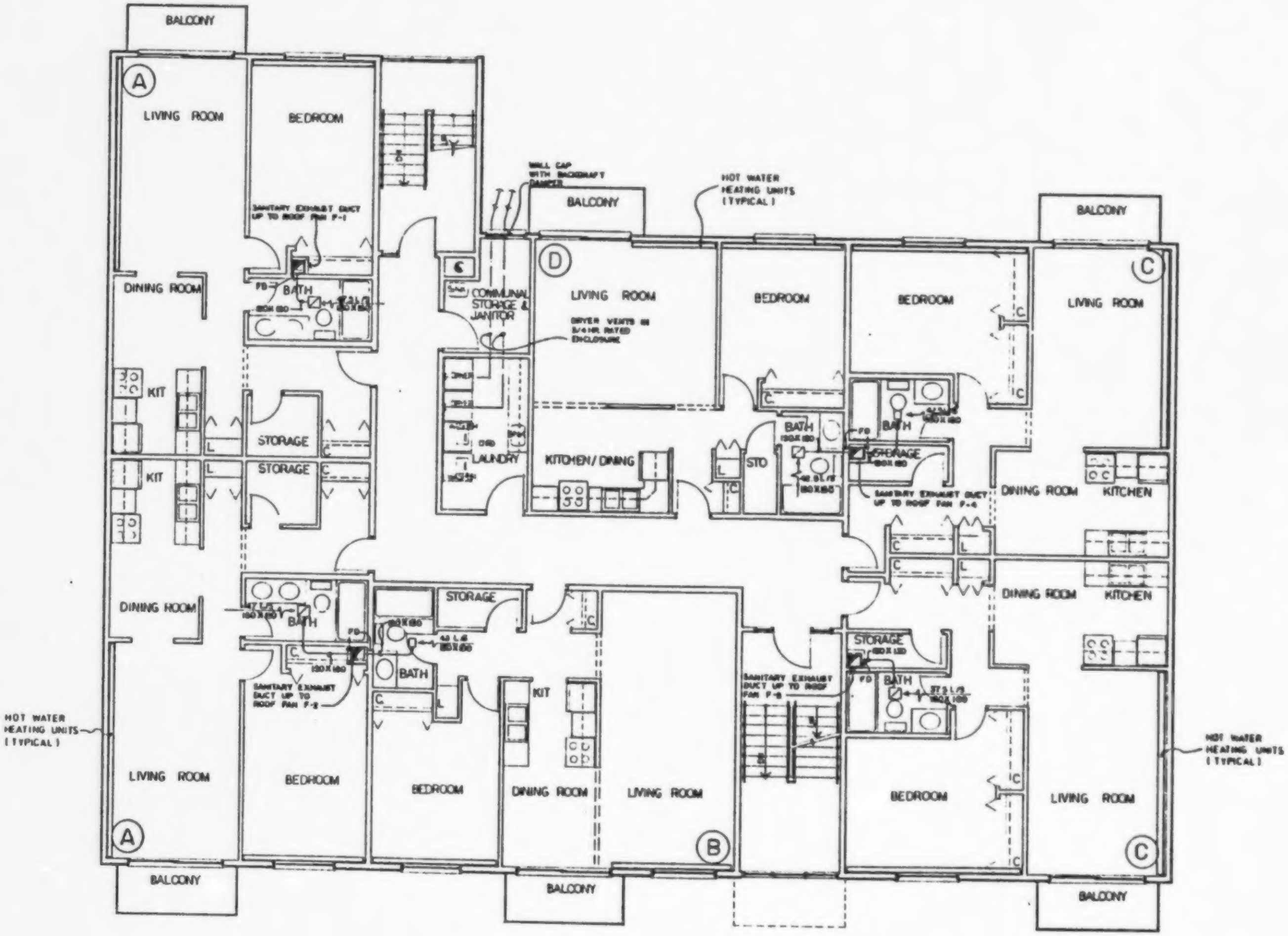
MECHANICAL NOTES

1. GAS FIRED HOT WATER HEATING BOILER SHALL BE INSTALLED IN ACCORDANCE WITH "THE GAS PROTECTION ACT AND REGULATIONS MADE PURSUANT TO THE ACT"
2. PROVIDE TYPE "B" CHIMNEY FOR BOILER.
3. PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR TO MECHANICAL ROOM
4. ALL HEATING EQUIPMENT SHALL BE SIZED ON A CALCULATED HEAT LOSS FROM THE DWELLING UNIT SO AS TO MAINTAIN A TEMPERATURE OF 22°C INSIDE AT MAIN FLOOR WHEN OUTSIDE TEMPERATURE IS -36°C.
5. ALL HEATING AND PLUMBING PIPING SHALL BE NON-COMBUSTIBLE.
6. INSULATE ALL SANITARY EXHAUST DUCTS FROM UNDERSIDE OF ROOF TO 3RD FLOOR (2x50mm).
7. PROVIDE A MINIMUM OF ONE WALL MOUNTED THERMOSTAT FOR EACH SUITE.
8. PROVIDE FIRE FLAPS ON EACH 150 x 150mm WASHROOM EXHAUST AIR GRILLE.
9. HEATING, VENTILATING AND AIR-CONDITIONING EQUIPMENT SHALL CONFORM TO THE APPROPRIATE REQUIREMENTS OF THE GAS PROTECTION ACT AND REGULATIONS MADE PURSUANT TO THAT ACT.
10. AIR FROM ONE SUITE SHALL NOT BE CIRCULATED TO ANY OTHER SUITE NOR TO A PUBLIC CORRIDOR
11. AIR CONTAMINANTS RELEASED WITHIN BUILDINGS SHALL BE REMOVED INSOFAR AS POSSIBLE AT THEIR POINTS OF ORIGIN AND SHALL NOT BE PERMITTED TO ACCUMULATE IN UNSAFE CONCENTRATIONS.
12 SELF-CONTAINED MECHANICAL VENTILATION SYSTEMS, SUCH AS KITCHEN AND BATHROOM EXHAUST FANS, SERVING ONLY 1 DWELLING UNIT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 9.33.

CV CONTROL VALVE
FD FIRE DAMPER

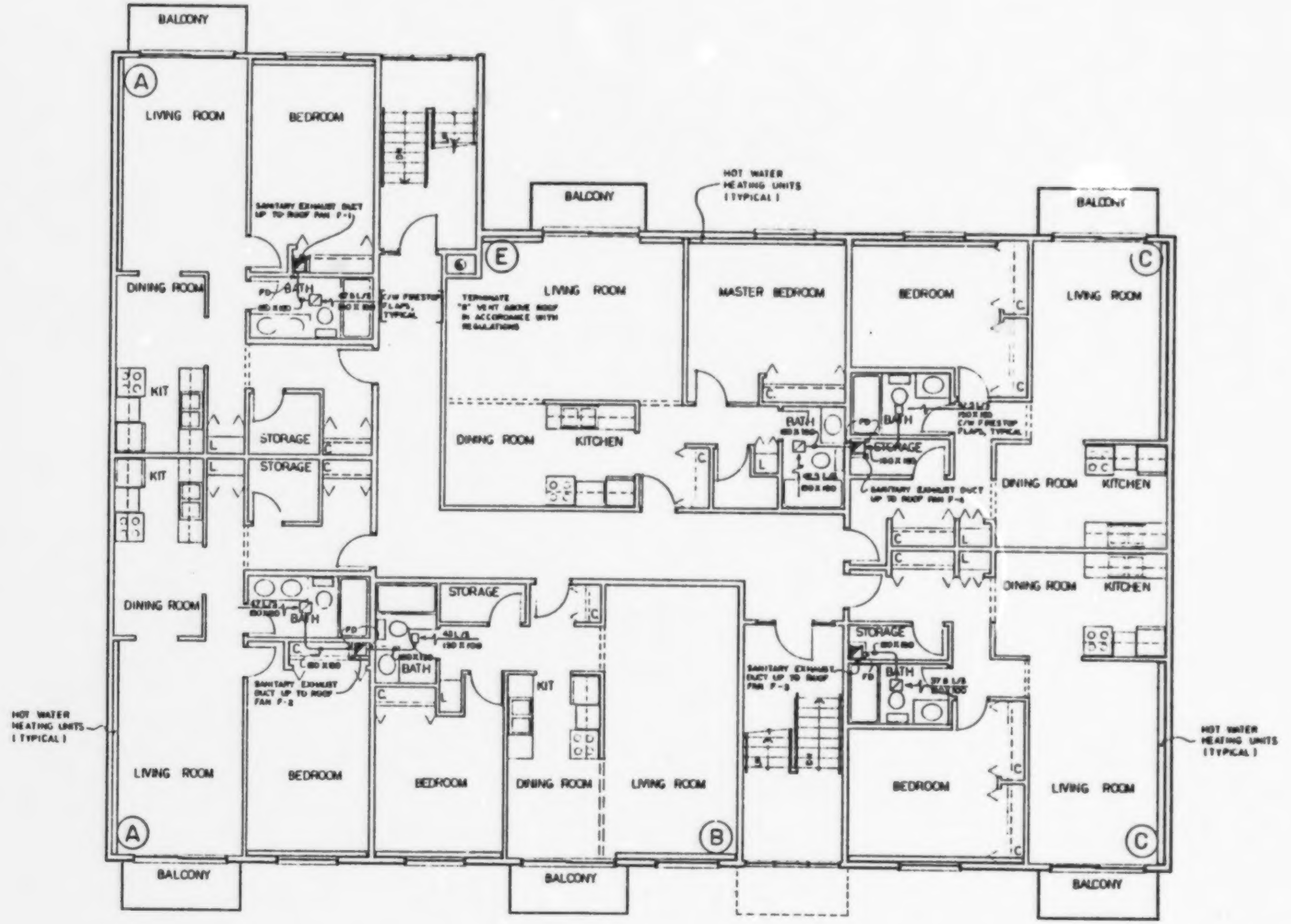
ALBERTA HOUSE COST COMPARISON STUDY

BASEMENT FLOOR PLAN
MECHANICAL LAYOUT
SCALE 1 : 50


BALCONY
A
LIVING ROOM
BEDROOM
SANITARY EXHAUST DUCT UP TO ROOF FAN F-1
BATH
FD
DINING ROOM
KIT
STORAGE
WALL CAP WITH BACKDRAFT DAMPER
COMMUNAL STORAGE & JANITOR
LAUNDRY
D
DRYER VENTS IN 3/4 HR. RATED ENCLOSURE
HOT WATER HEATING UNITS (TYPICAL)
KITCHEN/DINING
STO
C
L
SANITARY EXHAUST DUCT UP TO ROOF FAN F-4
KITCHEN
SANITARY EXHAUST DUCT UP TO ROOF FAN F-2
SANITARY EXHAUST DUCT UP TO ROOF FAN F-3
B

ALBERTA HOUSE COST COMPARISON STUDY

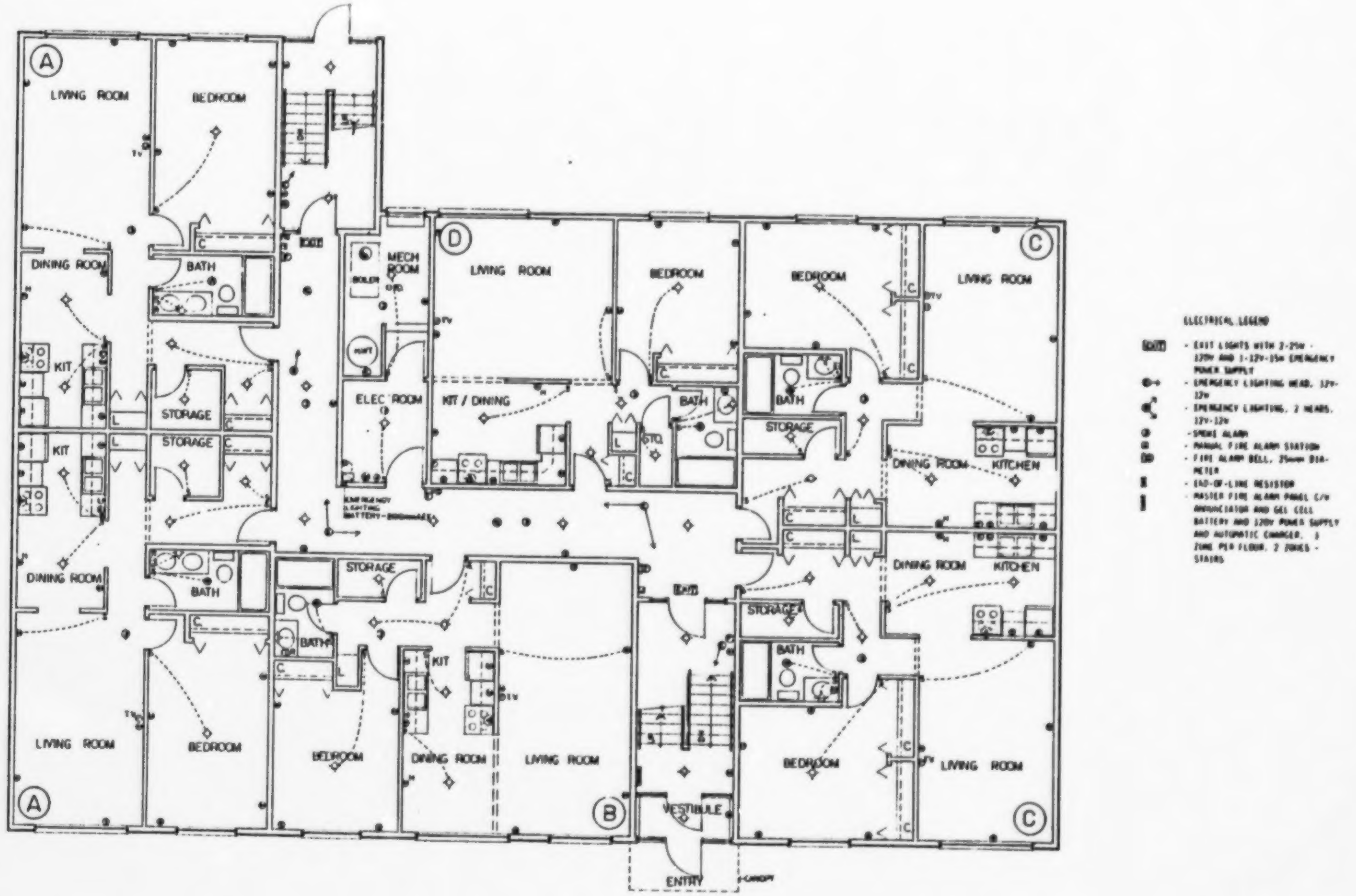
MAIN FLOOR PLAN
MECHANICAL LAYOUT
SCALE 1:50



BALCONY
A
LIVING ROOM
BEDROOM
SANITARY EXHAUST DUCT UP TO ROOF FAN F-1
DINING ROOM
BATH
FD
C/W FIRESTOP FLAPS, TYPICAL
KIT
STORAGE
E
LIVING ROOM
TERMINATE "B" VENT ABOVE ROOF IN ACCORDANCE WITH REGULATIONS
DINING ROOM
KITCHEN
MASTER BEDROOM
HOT WATER HEATING UNITS (TYPICAL)
C
SANITARY EXHAUST DUCT UP TO ROOF FAN F-4
SANITARY EXHAUST DUCT UP TO ROOF FAN F-2
SANITARY EXHAUST DUCT UP TO ROOF FAN F-3
B
L
C

ALBERTA HOUSE COST COMPARISON STUDY

2ND & 3RD FLOOR PLAN
MECHANICAL LAYOUT
SCALE 1:50

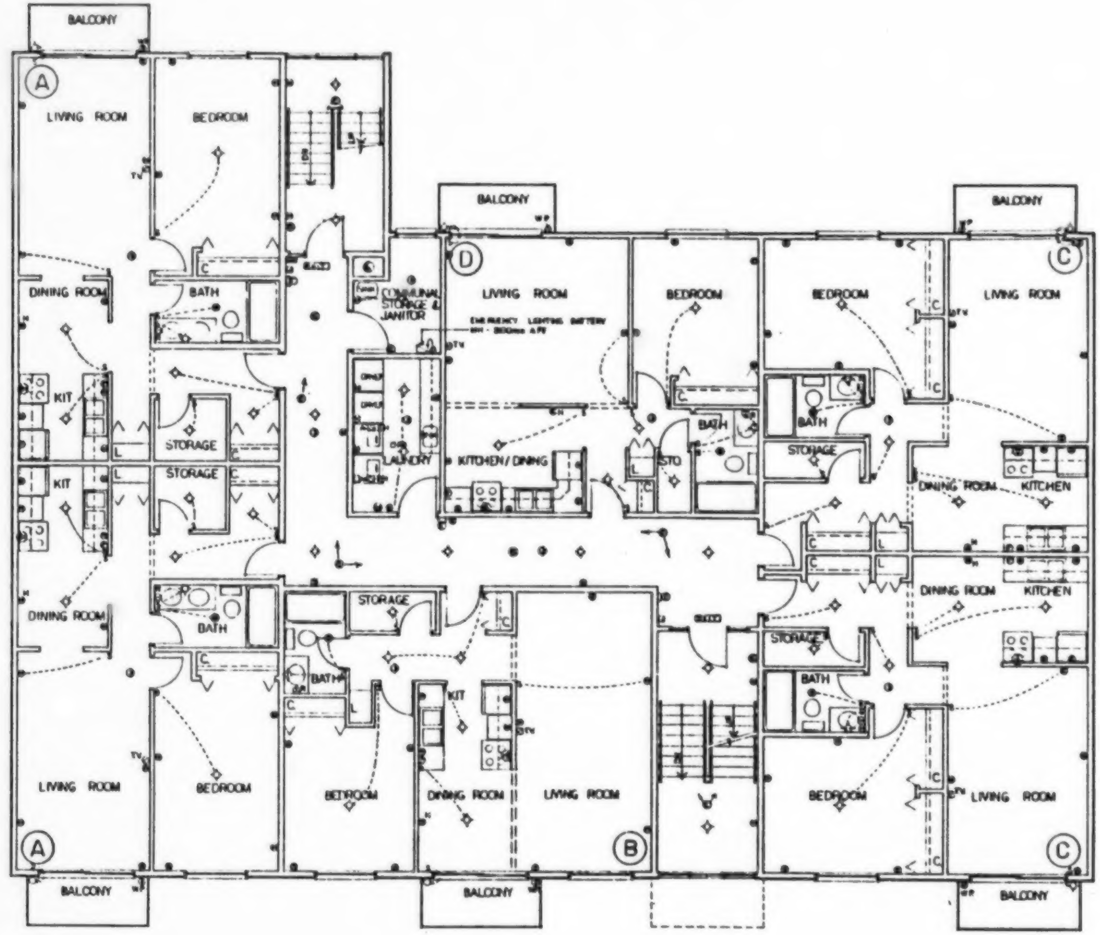

A
LIVING ROOM
BEDROOM
DINING ROOM
BATH
KIT
STORAGE
STORAGE
KIT
DINING ROOM
BATH
LIVING ROOM
BEDROOM
A
EXIT
MECH ROOM
BOILER
ELEC ROOM
D
LIVING ROOM
KIT / DINING
BEDROOM
BATH
STO.
STORAGE
BATH
BEDROOM
BEDROOM
LIVING ROOM
B
DINING ROOM
KIT
VESTIBULE
ENTRY
CANOPY
C
LIVING ROOM
BEDROOM
BATH
STORAGE
DINING ROOM
KITCHEN
DINING ROOM
KITCHEN
STORAGE
BATH
BEDROOM
LIVING ROOM
C
EMERGENCY LIGHTING BATTERY

ELECTRICAL LEGEND

- EXIT - EXIT LIGHTS WITH 2-25w - 120v AND 1-12v-15w EMERGENCY POWER SUPPLY
- EMERGENCY LIGHTING HEAD, 12v-12w
- EMERGENCY LIGHTING, 2 HEADS, 12v-12w
- SMOKE ALARM
- MANUAL FIRE ALARM STATION
- FIRE ALARM BELL, 25mm DIAMETER
- END-OF-LINE RESISTOR
- MASTER FIRE ALARM PANEL C/W ANNUNCIATOR AND GEL CELL BATTERY AND 120v POWER SUPPLY AND AUTOMATIC CHARGER. 1 ZONE PER FLOOR, 2 ZONES - STAIRS

ALBERTA HOUSE COST COMPARISON STUDY

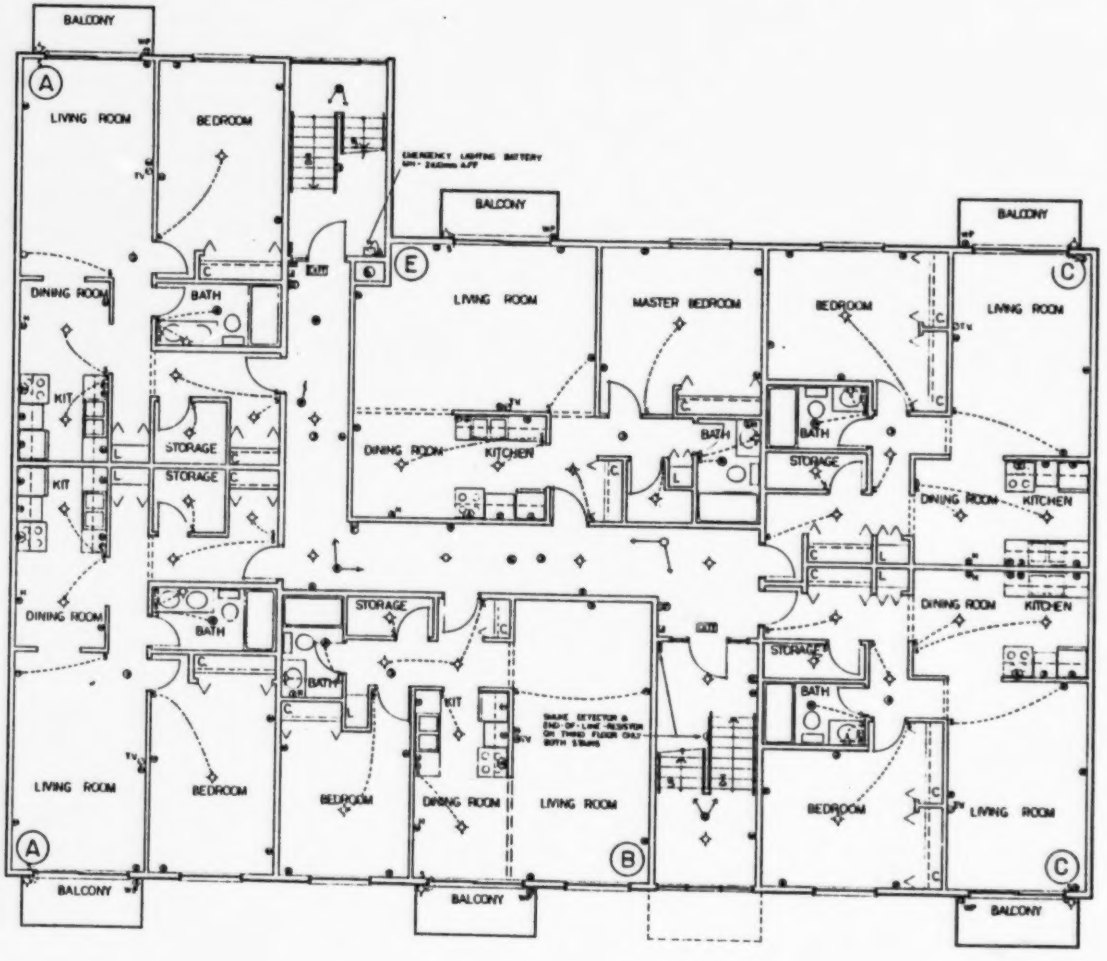
BASEMENT FLOOR PLAN
ELECTRICAL LAYOUT
SCALE 1:[illegible]


BALCONY
A
LIVING ROOM
BEDROOM
DINING ROOM
BATH
KIT
STORAGE
STORAGE
KIT
DINING ROOM
BATH
LIVING ROOM
BEDROOM
A
BALCONY
COMMUNAL STORAGE & JANITOR
LAUNDRY
BALCONY
D
LIVING ROOM
EMERGENCY LIGHTING BATTERY
KITCHEN / DINING
BEDROOM
BATH
STO
STORAGE
BATH
BEDROOM
KIT
DINING ROOM
LIVING ROOM
B
BALCONY
BALCONY
C
LIVING ROOM
BEDROOM
BATH
STORAGE
DINING ROOM
KITCHEN
DINING ROOM
KITCHEN
STORAGE
BATH
BEDROOM
LIVING ROOM
C
BALCONY
TV
WP

ALBERTA HOUSE COST COMPARISON STUDY

MAIN FLOOR PLAN
ELECTRICAL LAYOUT
SCALE 1:50

0
.5
1
2
3
4
5
6m


BALCONY
(A)
LIVING ROOM
BEDROOM
EMERGENCY LIGHTING BATTERY
MH - 2400mm AFF
BALCONY
(E)
LIVING ROOM
MASTER BEDROOM
BEDROOM
BALCONY
(C)
LIVING ROOM
DINING ROOM
BATH
KIT
STORAGE
STORAGE
KIT
DINING ROOM
KITCHEN
BATH
BATH
STORAGE
DINING ROOM
KITCHEN
DINING ROOM
BATH
STORAGE
DINING ROOM
KITCHEN
STORAGE
BATH
BATH
KIT
SMOKE DETECTOR &
END-OF-LINE RESISTOR
ON THIRD FLOOR ONLY
BOTH STAIRS
LIVING ROOM
BEDROOM
DINING ROOM
LIVING ROOM
BEDROOM
BEDROOM
LIVING ROOM
(A)
(B)
(C)
BALCONY
BALCONY
BALCONY

ALBERTA HOUSE COST COMPARISON STUDY

2ND & 3RD FLOOR PLAN
ELECTRICAL LAYOUT
SCALE 1:50